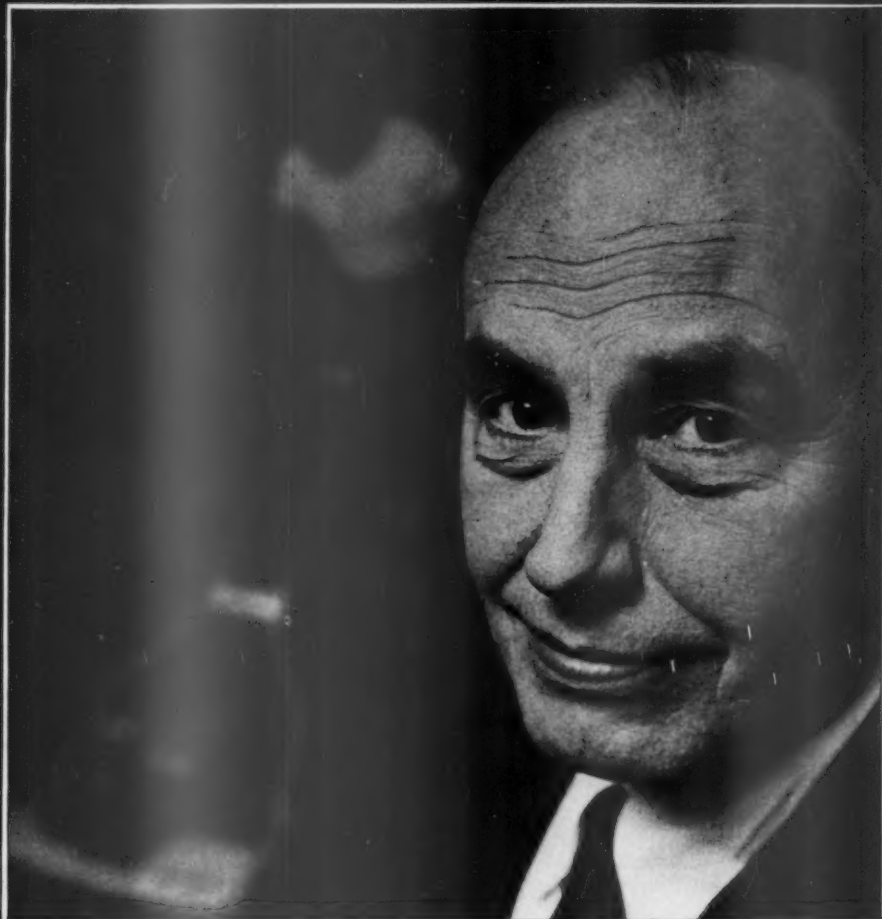
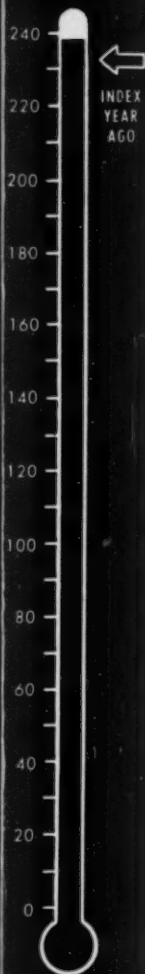


BUSINESS WEEK

BUSINESSMEN ARE

Worried

PAGE 24



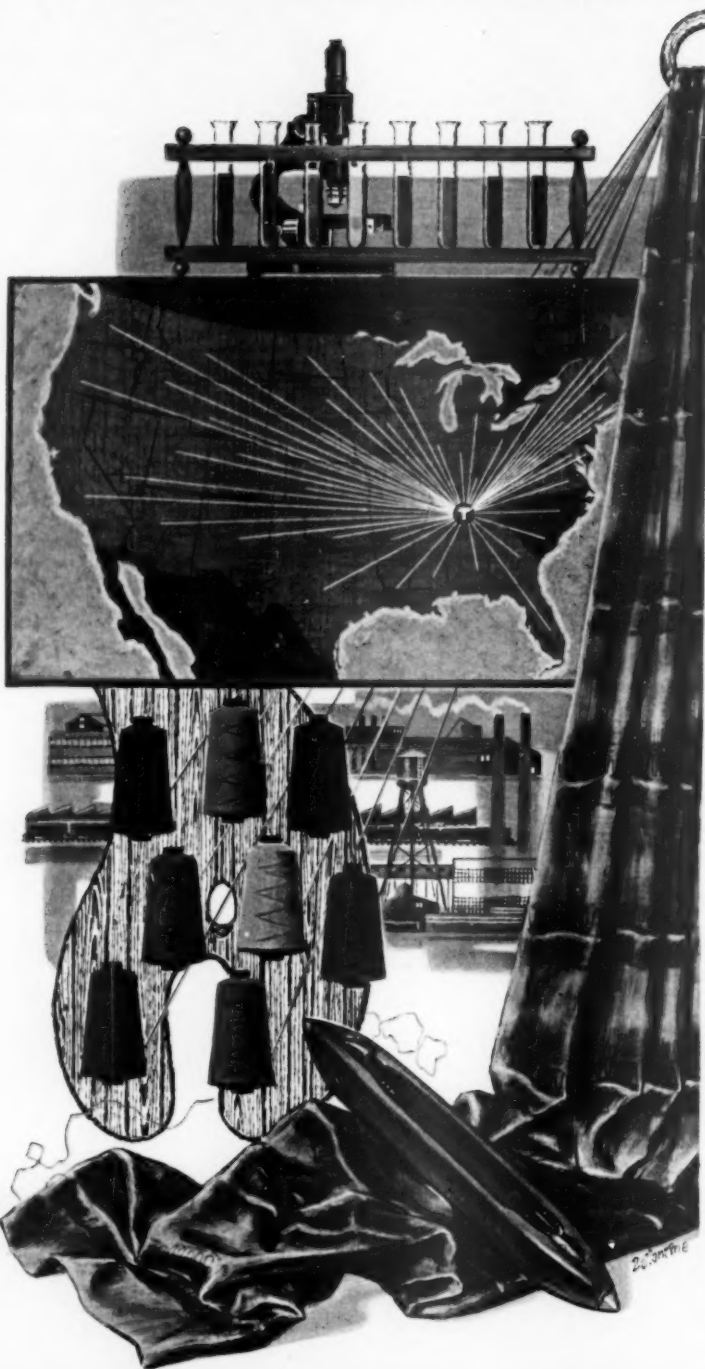
Reo's Joseph S. Sherer, Jr.: If you can't get a boy, get a motor (page 88)

A MCGRAW-HILL PUBLICATION

MAR. 22, 1952

TWENTY-FIVE CENTS

THERE'S A TOUCH OF **TENNESSEE** IN **CAROLINA TEXTILES**



The people of the Carolinas were making fine textiles even before the Constitution was signed. The fame of Carolina Textiles has grown with the Country and so has Tennessee's part in this most important industry. Today, Tennessee supplies Acetic Acid for bleaching and treating fabrics; Benzaldehyde for dye manufacture; Pig Iron and Ferro-alloys for machinery—not only to the Carolinas but to the other states producing textiles. And for cotton, the principal raw material, Tennessee supplies Sulphate of Ammonia for mixed fertilizers and Benzene Hexachloride for dust and spray formulations to protect the crops from the Boll Weevil.

Key industries in every state depend upon Tennessee for elements essential to their production processes. That's why Tennessee is known from Coast to Coast as an industry serving all industry.



TENNESSEE
PRODUCTS & CHEMICAL

Corporation

NASHVILLE, TENNESSEE

Producers of: FUELS • METALLURGICAL
PRODUCTS • TENSULATE BUILDING
PRODUCTS • AROMATIC CHEMICALS
WOOD CHEMICALS • AGRICULTURAL
CHEMICALS

RESEARCH KEEPS

B.F. Goodrich

FIRST IN RUBBER



Photo courtesy Arkansas Rice Growers Corp. Ass'n., Stuttgart, Ark.

Machine shuffles and deals rice

A typical example of B.F. Goodrich improvement in rubber

INSIDE that machine are hundreds of moving discs, with tiny pockets in them. They scoop up rice grains from troughs at the bottom, and carry whole grains up and over to be packaged. Smaller things like weed seeds and broken rice grains fall out and away. It is machines like this that make rice so cheap.

But not if the machine shuts down, because then costs go up. And the driving mechanism used to operate this machine was breaking on the average of every 4 days.

Someone suggested using V belts but engineers knew that no ordinary V belt could handle the job. Then they heard of the B.F. Goodrich grommet belt—a different kind of V belt developed and made only by B.F. Goodrich.

A grommet is a tension member inside the belt. It's made like a giant loop made by winding heavy cord on itself. The grommets make it a flexible belt but one that stands shocks and heavy loads. No other kind of belt has grommets; no other belt stands so much

punishment or lasts so long.

The drive that lasted 4 days was replaced a year ago with B.F. Goodrich grommet belts. They have never been off the drive, the machine has never been stopped a single moment for belt attention. Another example of better products, lower cost because of B.F. Goodrich research. *The B.F. Goodrich Company, Industrial & General Products Division, Akron, Ohio.*

B.F. Goodrich
RUBBER FOR INDUSTRY



The Metals that speak 5 languages

These metals speak in the cause of world peace . . . in the assembly halls of the United Nations.

You will find them at work in the amazing Simultaneous Interpretation System . . . the highly complex communication device that has broken down the barrier of language and brought order out of a Babel of foreign tongues.

The Chinese representative, for example, steps up to the microphone. Almost instantly, his words are flashed to the listening delegates, not only in Chinese, but in French, Spanish, Russian and English, as well. Delegates have only to turn a dial to select the interpreter who is speaking in the language they understand.

Now the United Nations delegates can do three days' work in one. And time is precious to these men who, with words and ideas, strive for understanding on a universal scale.

But this vital means of communication would not have been possible without copper, brass, lead, zinc, silver . . . metals and metal products such as those which flow in an ever-increasing stream from Anaconda's mines and mills.

Today, Anaconda is spending—and will continue to spend—many millions of dollars and many thousands of hours of research on a far-reaching program of development and expansion. Through increased production and the most modern manufacturing methods, Anaconda metals are keeping pace with advances in science and industry.

All this, we feel, will help bring closer the day when metals will speak just one language—the language of peace.



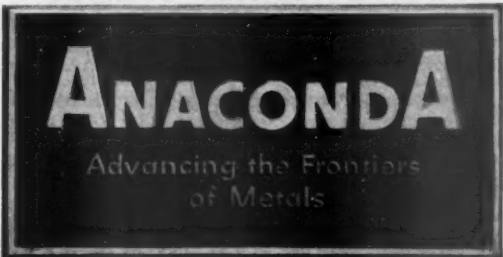
EACH DELEGATE selects his preferred language on a dial. This elaborate system is highly dependent on parts made from copper alloys produced by The American Brass Company (an Anaconda manufacturing division). They range from contacts, terminals, plugs and switches to delicate brass and phosphor bronze parts in microphones and headsets.



YOU TOO CAN SIT IN on meetings of the United Nations by means of television. Now, thanks to improved and widely used types of television lead-in lines . . . developed in the research laboratories of the Anaconda Wire & Cable Company . . . you can enjoy clear, clean picture reception in both congested and remote television areas.



MASTER CONTROL of the Simultaneous Interpretation System is a network of metal. In these times, defense needs have first call on all metal products. But Anaconda is producing more metals, developing new sources of ores and improved methods of mining and manufacturing in order to meet the demands of science and industry.



PRODUCERS OF: Copper, zinc, lead, silver, gold, platinum, cadmium, selenium, vanadium, superphosphate, manganese ore, ferromanganese.

MANUFACTURERS OF: Electrical wires and cables, copper, brass, bronze, and other copper alloys in sheet, plate, tube, pipe, rod, wire, forgings, stampings, extrusions, flexible metal hose and tubing.



PHOTO, HARRY FERGUSON, INC., DETROIT, MICH.

Seated "Center Control" ... Towmotor was first to place the operator where he belongs for maximum safety, maximum efficiency. Representatives in principal cities in U. S. and Canada. For catalog, write Towmotor Corporation, Div. 2, 1226 E. 152nd St., Cleveland 10, Ohio.



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RECEIVING • PROCESSING • STORAGE • DISTRIBUTION

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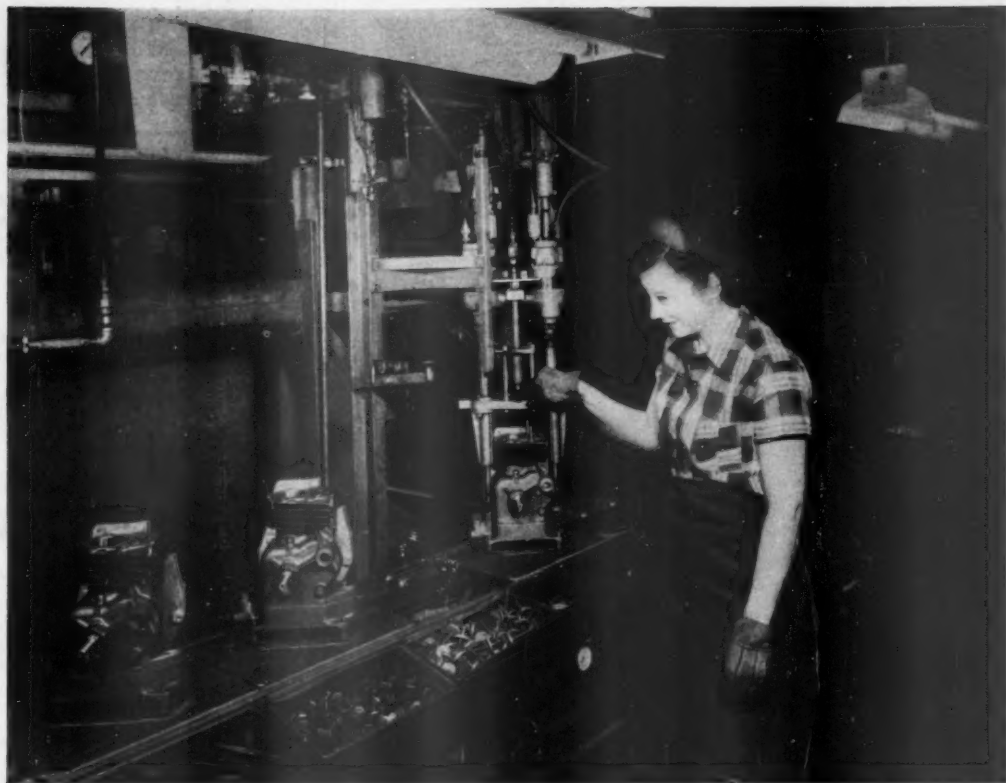
Herman C. Sturm

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BUSINESS WEEK • Mar. 22, 1952



HOW STREAMLINED METHODS CUT ASSEMBLY COSTS IN HALF

AN APPLICATION OF KELLER AIR TOOLS

A leading manufacturer of small gasoline engines has recently set up a new assembly line that is breaking all records by assembling engines in half the time, and at half the cost. Keller Air Tools have contributed much to the success of the new setup.

Because of the speed with which engines are now assem-

bled, it has been possible to discontinue making a number of subassemblies. There is now a single streamlined assembly line where engines move from station to station in almost uninterrupted flow.

One of the more unusual arrangements for using Keller Tools is shown above. Two pneumatic nut setters are so

mounted on a fixture that they run down two bolts at once. At other stations along the line as many as four and six bolts are run down simultaneously by pressing a single control valve.

Keller application engineers with headquarters in principal cities, are always glad of an opportunity to help manufacturers devise ways to improve methods and reduce costs.



Air Tools engineered to industry

KELLER TOOL COMPANY, GRAND HAVEN, MICH.

AIR MOTORS • AIR HOISTS • AIR HAMMERS • COMPRESSION RIVETERS • GRINDERS • DRILLS • SCREW DRIVERS • NUT SETTERS



ON THE GO

... every hour of the day and night, America's railroads are busy bringing you the great bulk of the things you eat, wear and use in your daily life and work.

ON THE GO ... from one end of the country to the other, the railroads are the nation's basic carrier of goods—hauling more freight more miles between towns and cities than all other kinds of transportation put together.

ON THE GO ... for the future, too, the railroads are improving and enlarging their facilities to serve the nation's needs with even greater efficiency. To make

this continuing investment in America's future, railroads need two things: materials, principally steel, for building new freight cars and locomotives ... and money to pay for these improvements. And that money can come only from adequate rates, based on today's higher costs of operation.

Because rail service is a part of every farm, every factory, every business—essential to our everyday life and vital to defense—it is important that the nation's railroads stay strong—able to keep “on the go” for the USA!

ASSOCIATION OF AMERICAN RAILROADS

WASHINGTON 6, D. C.



You'll enjoy **THE RAILROAD HOUR** every Monday evening on NBC.

In BUSINESS this WEEK ...

• Decontrol ...

... is viewed with little enthusiasm by OPS. The controllers have a plan for suspending controls on some prices—but they are slow to say which. P. 26

• Price Wars ...

... proved a headache to Macy's New York—and to the Weil management. Macy's bet it could regain its leadership with low prices and big volume—and lost. P. 32

• Hot Rods ...

... have become a respectable hobby—and the foundation of a fair-sized industry. P. 46

• People ...

... are one natural resource on which Canada is short. But the Canadian population promises to continue to shoot upwards. P. 64

• Black Markets ...

... in currencies are flourishing around the world. Here, the best-known expert in the U.S. gives you a handy guide to them. P. 118

• Britain's Butler ...

... has put his country on a new economic road. But he can only gamble that his strategy will restore customers' confidence in sterling. P. 181

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"Good? It's so Good We Guarantee it!"



● Last fall Phillips Petroleum Company offered a friendly invitation on behalf of a new product.

To motorists we said: "Try new Phillips 66 Heavy Duty Premium Motor Oil for ten days . . . or up to 1,000 miles. Then, if you aren't satisfied on every count, go to any Phillips 66 Dealer, and he will refill your car's crankcase with any other available oil you want . . . at our expense."

Bold advertising? Perhaps . . . but the

quick public response to our offer, and the enthusiastic acceptance of this new product, was a remarkable demonstration of confidence in the Phillips 66 trade mark.

This confidence is based not alone on a reputation for reliable consumer products, but also on the company's outstanding record in original research.

This confidence in the Phillips 66 trade mark is one of the most valued assets of Phillips Petroleum Company.

PHILLIPS PETROLEUM COMPANY

Bartlesville, Oklahoma

We put the Power of Petroleum at America's Service

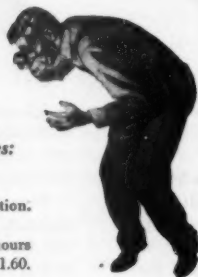




Short or Long Term CAPITAL LOSS?

*No matter how they are figured —
eye accidents are costly to industry.
Here are some of the estimated charges:*

- 1 They cost nearly \$400 in average compensation.
- 2 They cost \$176,000,000 in lost man hours annually at an average per hour rate of \$1.60.
- 3 They cost an unknown but sizeable sum in idle machine time. (Remember, industry invests \$6,000 or more in tools to provide each job.)
- 4 They cost another appreciable sum in impaired worker morale.
- 5 They cost additional money in increased rejects and lowered output when green workers must be substituted for skilled.
- 6 They cost money in first aid and medical attention whether the eye injury is major or minor.



Any industrial eye accident is a capital loss. If you lose the skill of a valued worker through the loss of an eye, you have a long-term capital loss in a very real sense—with no gain, long or short, to compensate. Contact your nearest AO Branch Office and learn how an AO Eye Protection Program can practically elim-

inate these costs and pay for itself in less than six months. Or write American Optical Company, 413 Vision Park, for free booklet "Improved Industrial Vision" which tells how AO's Industrial Vision Program cuts costs, increases production, decreases accidents.



American Optical

SAFETY PRODUCTS DIVISION

Southbridge, Massachusetts • Branches in Principal Cities

BUSINESS OUTLOOK

BUSINESS WEEK

MARCH 22, 1952



Users of steel weren't rushing to buy this week, and here's why:

They knew the government could ill afford to let a steel strike occur. They knew, moreover, that the White House would bend every effort to end a strike quickly if one were to take place.

Some steel was bound to be lost whether the strike came off or not.

That's inherent in the nature of the business. Furnaces have to be barked if there is any danger of a shutdown. And this was beginning as early as midweek.

Thus the industry won't come up to its start-of-the-week schedule. Then it was running at 102.4% of capacity. That would have pushed the week's output up to 2,127,000 tons, another new record.

Losing a little steel now seems less important than it would have a few months ago. Easier supplies of many steel products account for this. But any major loss could change the whole decontrol picture.

Conditions abroad continue to ease the supply of key commodities in this country. That's true in metals, rubber, even cotton.

Currency conditions started it, of course, and recessions abroad help it along. Prices are the most obvious barometer.

Lead is the outstanding example. Its price was the first to drop into line with the ceiling in this country. More recently, the premiums on zinc and aluminum have been evaporating rapidly.

Our government has twice cut its selling price on natural rubber, and some cotton is being offered in this country by foreign producers.

Not all the metal shaken loose in foreign markets will find its way to consuming industries in this country. Uncle Sam will take some to replace metal released from his stockpile when the pinch was tightest last year. This is happening in lead.

Rubber is one raw material whose supply seems completely assured.

True, much of our natural rubber comes from Malaya and Indonesia, where civil strife is a constant threat. Yet output still is large.

Beyond that, synthetic production at home now is up to 930,000 tons a year, according to John L. Collyer, head of Goodrich. This, with the addition of a little natural rubber from the stockpile, could be rationed out to meet all U. S. needs if an emergency should arise.

That would pinch car owners. But, after all, we did with only 800,000 tons—natural and synthetic—in 1944 and 1945.

Tire makers are optimistic on this year's output—if not on prices.

Even allowing for the cutback in the number of new cars, their thinking is in terms of 65-million to 70-million tires. That would be over 20-million for original equipment, 45-million or more for replacements.

On such a schedule, each of the 42-million cars on the road is figured to be good for more than one new tire sale during 1952.

Rubber use should run 1¼-million tons; 1951's was 1,214,000.

Tin supplies look ample for foreseeable needs—and our government is sticking stubbornly to its price line. This week's contract with Indonesia

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
MARCH 22, 1952

at \$1.18 a lb. hews to the ceiling set in the recent British deal—and seems to offer Bolivia little hope for a better figure.

Conditions in most depressed consumer lines won't get much worse.

Someone will arise quickly to ask, "How could they?" Actually, though, most have probably passed the bottom.

Output of representative consumer durable goods has flopped just about 40% from the postwar high. Some soft goods may be off that much, too.

But sales to the consumer haven't fallen anything like that. The difference has come out of inventory.

Retail figures are bound to make better reading from now on.

Next week we begin to compare 1952's pre-Easter sales with post-Easter volume a year ago. After Easter, we will be contrasting business with last year's long-drawn-out slack.

Dollar volume won't show big gains, though, because most price tags are appreciably lower now.

Money is ample to support a high level of retail sales—for all the arguments heard to the contrary.

Consumers, after paying their taxes, are taking in better than \$227-billion annually. That's about \$11-billion higher than a year ago.

Privately held bank deposits and currency, at \$185-billion, are \$10-billion above the level this time last year.

Incidentally, money supply didn't drop nearly so sharply in January as it did a year ago. The decline was \$500-million, against \$1½-billion; this can be accounted for by the 1951-52 yearend spending splurge, which, quite naturally, depleted liquid holdings.

Some slight glimmerings of improvement in demand for textiles and leather have been noted in the market.

Buying of leather for fall merchandise has picked up a bit. This brought a rally—although not a very sturdy one—in hide prices.

And scattered textile orders are attracting unusual attention. Mills, however, have seen too many recent flurries suddenly fall dead to get very excited at this stage.

Military demand makes textile activity look better than it actually is. That, according to the trade, accounts for cotton use of 39,089 bales per working day in February against 37,655 in January.

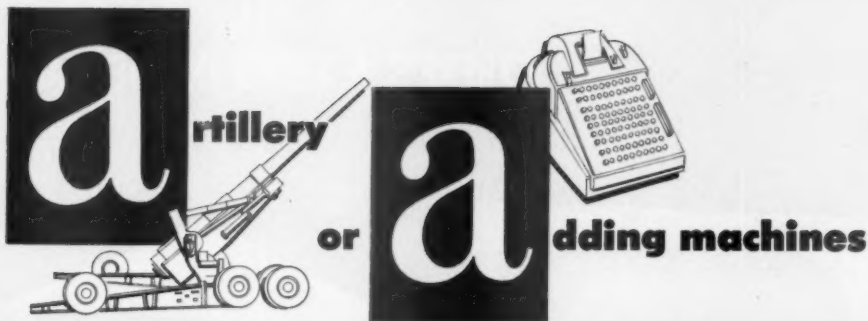
The decline from a year ago was about 6,000 bales a day.

Rayon and acetate shipments in February were 8½-million lb. That's probably a bare 60% of capacity.

"Full employment" for the last half of this year implies an average of 62.8-million people holding jobs. That's the conclusion of Congress' Joint Committee on the Economic Report.

And one thing is sure: If that many people are holding jobs, at going wage rates, there will be no lack of consumer purchasing power.

This, incidentally, makes no allowance for attracting emergency workers into the labor force, either.



Many leading defense plants rely on Gulf Periodic Consultation Service for practical help on every problem that involves a petroleum product.



Gulf Periodic Consultation Service provides expert help in selecting the most suitable cutting and quenching oils for business machine parts.

... industry cuts costs through **GULF PERIODIC CONSULTATION SERVICE**

From this one source you can get practical assistance on any problem that involves a petroleum product!

Gulf Periodic Consultation Service makes available to you the cooperative counsel of experienced sales and staff engineers on the selection and application of lubricants, fuels, rust preventives, solvents, waxes, cutting, and special process oils.

Their recommendations and suggestions nearly always result in lower-cost operation—and that's exactly what they have constantly in mind!

Gulf Periodic Consultation Service is available to mines, quarries, plants, railroads, contractors, fleet, and marine operators from Maine to New Mexico. Send the coupon for copy of a booklet

which gives more information on how this advanced cooperative plan can help you cut costs and improve production.



Gulf Oil Corporation • Gulf Refining Company
719 Gulf Building, Pittsburgh 30, Pa.

Please send me without obligation a copy of your booklet "Gulf Periodic Consultation Service."

Name.....

Company.....

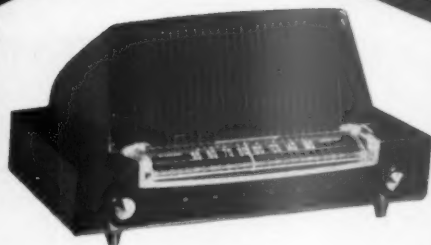
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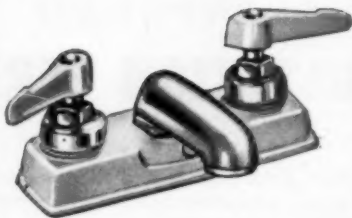
THERE'S A TREND IN THE MAKING . .



White Beetle housing for Osterell two-beater hand mixer introduced by John Oster Manufacturing Co., Racine, Wisconsin. Molded by General Die Mold Company.



Philco's new concept of table radio, design #548M. Cabinet of maroon Beetle molded by Consolidated Molded Products.



Escutcheons of Beetle on new series of Sears, Roebuck & Co., plumbing fixtures in popular gray; compression molded by Plastic Masters, Inc.



New Waring Blender, #PB5, has gray and white Beetle housing; molded by Watertown Manufacturing Company for Waring Products Corporation.

TREND TO COLOR STRONGER THAN EVER. BEETLE PLASTICS GIVE PRODUCTS COLOR . . ANY COLOR . . DURABLE

products with COLORFUL HOUSINGS SELL

**but BEETLE® molding compounds
give you more than color**

BEETLE is a thermosetting plastic. That means it is rigid—that it has heat and flame resistance.

Engineers say BEETLE doesn't build up electrostatic charges (the housewife says this means it won't attract dust . . . stays attractive and clean).

With BEETLE, you get rich, attractive colors, and your housing has a solid substantial feel. And you can "mold in" any color you want.

BEETLE has a durable, hard, scratch-resistant surface . . . and even when scratching does occur, it is hard to see: the molded-in color goes all the way through from surface to surface. The advantages over a painted surface are obvious—and a valuable selling point!

BEETLE is easily wiped clean—and can be washed with soap and water again and again without damage to its beautiful surface. No rust, no tarnish; and no waxing or polishing needed.

BEETLE is a *quality plastic*. It will add quality—and sales—to your product.

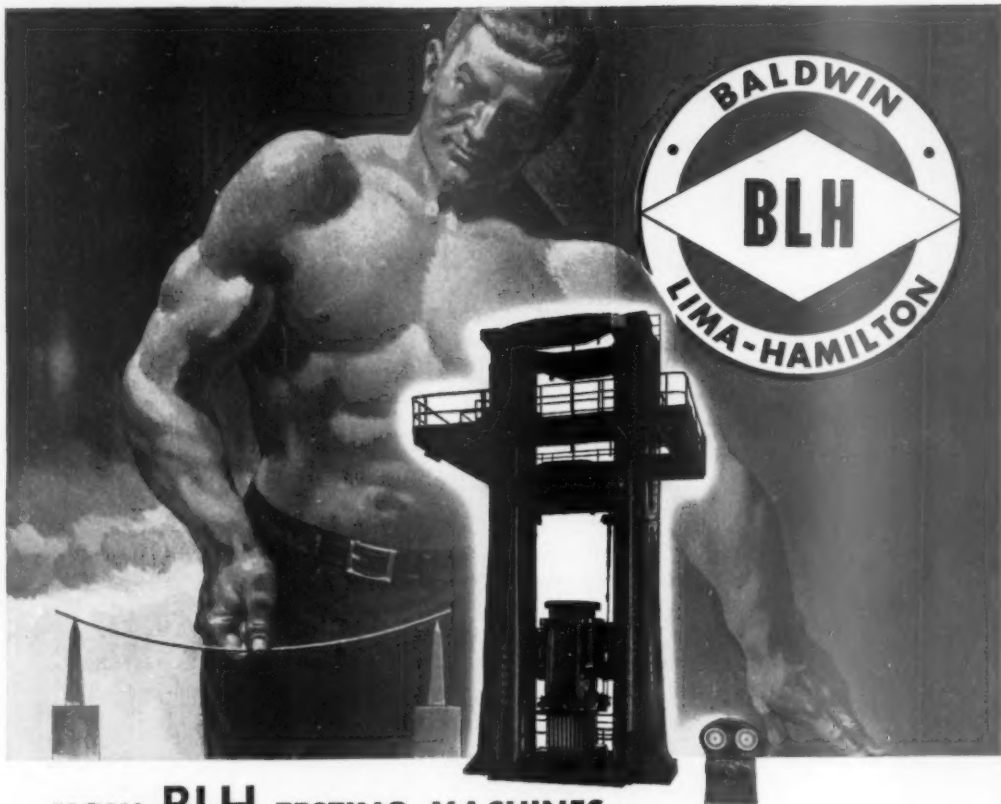
If you are housing an electrical part, here's another plus: BEETLE rates 102-136 under ASTM test method D-495-42, and many products made from BEETLE have easily earned UL approval.

Let us tell your staff—both your sales and design people—more about the job BEETLE can do to make *your* product lead the sales parade in its field.

COLOR. ADVICE RE BEETLE FOR YOUR PRODUCT AVAILABLE FROM:

AMERICAN *Cyanamid* COMPANY
PLASTICS AND RESINS DIVISION

30D Rockefeller Plaza, New York 20, N. Y.



HOW BLH TESTING MACHINES bring out the **WORST** in materials

These days, it's not enough to know how a product will stand up when new. You've got to be able to peer into the future—find mechanical weaknesses before hard usage brings them to light.

To help you, BLH has gathered together famous men in the field of testing—is continually using their talents to expand what is already the world's most complete line of mechanical testing equipment.

For example, they've developed SR-4 strain gages as small as postage stamps which can determine fluctuating stresses in the wings of diving planes—the force of gas explosions—the weight of anything. And the largest testing machine ever made—the 5,000,000 pound giant shown above. Even "fatigue" machines that can

subject parts or products to millions of recurrent stresses simulating those found in actual use.

Scores of other testing devices offered by BLH will help you search out mechanical strength or weakness no matter what you make.

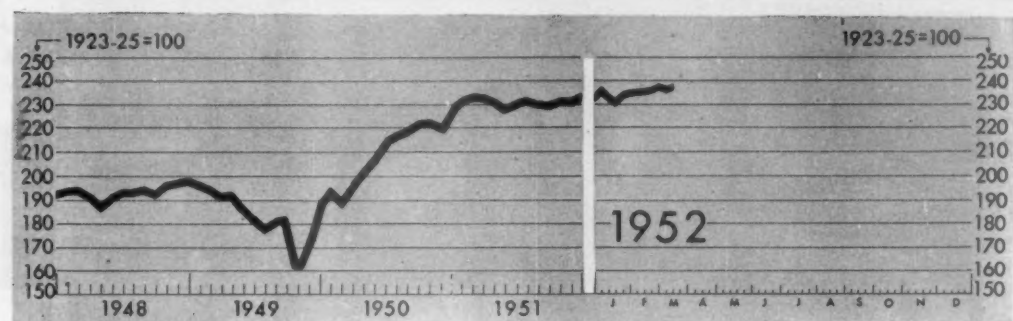
Though a dramatic illustration of the versatility of our engineers, the creating of unusual testing devices is but *one* field where BLH engineering is at work. So whether you need locomotives or powerful presses; diesel engines or machine tools; marine propellers or can-making equipment; you can be certain they are *better products* because of pioneering engineering by BLH.

Why not write for the booklet "The Story of Baldwin-Lima-Hamilton?"

BALDWIN-LIMA-HAMILTON CORPORATION
Philadelphia 42, Pa. • Offices in Principal Cities

BALDWIN-LIMA-HAMILTON

FIGURES OF THE WEEK



Business Week Index (above)

\$ Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
*238.5	†237.5	236.4	234.5	173.1

PRODUCTION

Steel ingot production (thousands of tons)	2,127	2,114	2,090	2,021	1,281
Production of automobiles and trucks	118,777	†115,126	111,821	182,781	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)	\$40,734	\$39,489	\$34,801	\$43,112	\$17,083
Electric power output (millions kilowatt-hours)	7,414	7,497	7,440	6,903	4,238
Crude oil and condensate production (daily av., thousands of bbls.)	6,404	6,421	6,356	6,043	4,751
Bituminous coal production (daily average, thousands of tons)	1,650	1,715	1,764	1,680	1,745

TRADE

Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars)	74	78	75	80	82
Carloadings: all other (daily av., thousands of cars)	45	48	48	45	53
Department store sales (change from same week of preceding year)	-16%	-15%	-8%	+20%	+30%
Business failures (Dun and Bradstreet, number)	156	170	125	185	217

PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100)	437.7	436.6	436.7	523.5	311.9
Industrial raw materials, daily index (U.S. BLS, Aug., 1939 = 100)	289.6	291.0	300.3	369.4	198.8
Domestic farm products, daily index (U.S. BLS, Aug., 1939 = 100)	338.6	339.0	343.4	411.1	274.7
Finished steel composite (Iron Age, lb.)	4.131¢	4.131¢	4.131¢	4.131¢	2.686¢
Scrap steel composite (Iron Age, ton)	\$42.00	\$42.00	\$42.00	\$43.00	\$20.27
Copper (electrolytic, Connecticut Valley: lb.)	24.500¢	24.500¢	24.500¢	24.500¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	\$2.50	\$2.48	\$2.49	\$2.40	\$1.97
Cotton, daily price (middling, ten designated markets, lb.)	40.95¢	40.01¢	39.77¢	45.14¢	30.56¢
Wool tops (Boston, lb.)	\$1.90	\$1.90	#	\$4.70	\$1.51

FINANCE

90 stocks, price index (Standard & Poor's)	189.2	188.1	187.6	171.2	135.7
Medium grade corporate bond yield (Baa issues, Moody's)	3.51%	3.52%	3.52%	3.25%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	2½%	2½%	2½%	2-2½%	3-1½%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks	53,406	52,625	53,090	51,826	††45,210
Total loans and investments, reporting member banks	73,641	73,423	73,678	69,538	††71,147
Commercial and agricultural loans, reporting member banks	21,237	21,155	21,144	18,956	††9,221
U. S. gov't and guaranteed obligations held, reporting member banks	31,854	31,718	32,185	30,782	††49,200
Total federal reserve credit outstanding	23,778	23,883	23,753	23,652	23,883

MONTHLY FIGURES OF THE WEEK

MONTHLY FIGURES OF THE WEEK		Latest Month	Preceding Month	Year Ago	1946 Average
Average weekly earnings in manufacturing	February	\$66.83	\$67.08	\$63.84	\$43.82
Bank debits (in millions)	February	\$128,023	\$138,520	\$114,064	\$87,502
Exports (in millions)	January	\$1,246	\$1,436	\$974	\$811
Imports (in millions)	January	\$922	\$801	\$1,024	\$412

* Preliminary, week ended Mar. 15.

†† Estimate (BW—Jul. 12 '47, p16).

Not available.

‡ Data for "Latest Week" on each series on request

† Revised



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The patient was frightened. He had suffered a completely crushed and torn pelvis and serious fractures in an accident at work, in a remote section of the Southwest. He received prompt and careful treatment by local doctors, who decided he could not live without specialized surgery in a large medical center. So Liberty Mutual chartered a plane to fly him to Dallas, 500 miles away. To keep him alive a doctor and nurse were engaged to fly with him. After eighteen months of surgery and convalescence, he returned to remunerative employment.

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WASHINGTON OUTLOOK

WASHINGTON
BUREAU
MAR. 22, 1952

A
BUSINESS
WEEK
SERVICE

An end to the Controlled Materials Plan early in the new year is official. Chief controller Fleischmann now acknowledges it. The question is: How fast will steel, aluminum, and copper supplies be freed?

Aluminum will be virtually freed in January. Most steel shapes will be decontrolled by Oct. 1. The military will get what it needs by simple priority ratings.

Copper will not be let loose for a longer period. There isn't enough new metal coming in to warrant full civilian consumption.

Businessmen will be relieved of some headaches—no keeping records, making reports, worrying about inventory compliance.

Some items will remain tight: steel rod and tubing, hard alloy steels, and the alloying metals like nickel, cobalt, etc.

A DO (defense order) system to satisfy military needs presents problems. For example: It's easy to get steel for a gun barrel via a simple priority; the components to make the gun itself are another matter. But the Defense Production Administration thinks it can work out a relatively simple formula for components by the time CMP is lifted.

The Wage Stabilization Board is writing some new productivity rules. They deal with the giving of wage raises in return for theoretical advances in efficiency.

What WSB is doing looks like a boon to management. In the Wright Aeronautical-UAW-CIO case this week, for example, WSB awarded productivity hikes after the employees agreed to quit raising time-consuming grievance charges.

Here are the rules: The company pays for increased efficiency, while the union promises that its stewards will be restricted in the amount of time they can spend investigating grievances. And the company has more leeway in deciding layoffs and promotions.

Out of such cases will come a solid productivity formula. In general, WSB will let other unions have the 4¢ annual raise that General Motors gives for increased output. One rule WSB will demand, if the Wright case and others are any clue: The union must not interfere with new methods and techniques that management puts in to boost output.

Congressmen are getting cockier about the chances of budget cutting. The usual cynicism that "Congress talks economy but votes extravagance" is not necessarily true this year.

The big reason: Both the Senate and the House seem willing to cut expenses. New Dealers like Douglas of Illinois and Benton of Connecticut go along with Byrd of Virginia and George of Georgia and O'Mahoney's Joint Economic Committee.

The House Appropriations Committee expects to cut \$10-billion. That's the amount of the deficit Truman figures for fiscal 1953. After all's said and done, the total won't be that high. But key men predict that, short of war, \$5-billion or better can be trimmed.

This is the way Douglas and Benton would do it: \$4-billion from the military, \$1.8-billion from foreign aid, \$1.8 billion from such civilian pro-

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
MAR. 22, 1952

grams as public works, transportation, veterans, and housekeeping. This makes \$7.6-billion—enough to eliminate a cash deficit in 1953.

That's too optimistic. But signs that some deep economies are coming showed up in the first big money bill voted on in the House: \$700-million was knocked off the budget.

Fair trade: Congress may vote a new federal enabling law. But Truman considers fair trading as price fixing. So he will use his veto; and Congress can't override him.

Tidelands oil won't be settled this year. Congress is unwilling to give over title to the federal government. But Truman will veto a quit-claim law restoring title to the states. So there'll be another year of stalemate.

The trend of industry away from big cities is emphasized in a confidential report on the location of 449 construction projects costing \$3-billion. Cities over 200,000 got 73 of the projects, and nearby areas got another 123. But more than half went to less congested spots.

Russia's weapons production has Pentagon experts baffled. The MIG jet plane is an example.

Where Russia's nickel comes from is one question they can't answer. Russia is turning out some 500 MIGs monthly. And captured planes show use of nickel beyond what Russia is supposed to have.

Another mystery is speed. Recently, Red MIGs have been able to turn on an extra burst and get away from our airmen. The only clue is that our gun cameras show a circle of white smoke coming from the MIG tail just before it zips out of range.


We underestimated the MIG in the beginning. Now the Pentagon is concerned lest we have underestimated the quality and quantity of Russia's other weapons, too.

Eisenhower is pulling up to and ahead of Taft. He still can't claim so many delegates. But the popular sweep that began in New Hampshire and then zoomed in Minnesota more than matches Taft's strength.

Another such write-in performance in Nebraska Apr. 1 would just about make Eisenhower the man to beat.

All this makes the Taft-Eisenhower contest in New Jersey crucial. A defeat would have been fatal to Eisenhower in New Hampshire. Now a beating in New Jersey Apr. 15 would make Taft's road rocky. Not that the backing he already has would automatically melt away. But Taft needs some victories if he is to pick up the additional delegates he must have to win in Chicago.

Truman's day of decision isn't far off. Democratic Chairman McKinney's announcement that (1) Truman's name would not be in California's June primary, and (2) a Korean peace would lessen Truman's chances of seeking reelection is the first official hint that the President won't run. But no one really knows yet.



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towns getting TV for first
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Some 10-million sets a year
for next five years, worth at
least \$2-billion.

Terrifically expensive na-
tionwide chains of 100 or
more outlets.

Who can pay for nation-
wide coverage? What will
it do to other media?

Big new TV-film market for
movie producers.

High Stakes in a Big Giveaway

There has never been anything like it in history.

Starting sometime in the next few months, and spreading over the next five years, the Federal Communications Commission will hand out more than 1,500 franchises for new television stations. Every one of them will have a concrete dollar value anywhere from \$1-million to \$10-million.

And that means FCC has two fantastic jobs to do:

• In effect, it has to stand on a street corner with a strictly limited

number of million-dollar bills in its hand, ask everybody who wants one to line up—and then decide who gets one and who doesn't.

• In one series of actions, it has to determine for years to come the detailed, company-by-company pattern of an industry that's obviously destined to rank high among the country's big businesses.

The ice will start cracking as soon as FCC unthaws its 34-year freeze on new TV stations. It may happen this month. When it does, you can look for

some fancy corner-cutting, big deals, pressure, and politicking as the scramble starts for the choice seats in the boat.

• **The Big Switch**—TV wasn't always that attractive. Right after the war, when commercial TV was trying to sell itself, a lot of people took a good look—and didn't buy. TV seemed too rickety, risky, and expensive. Why, then, today's battle for channels in every city that's big enough to have any television at all?

The reason is simple: The profit

picture on 106 of the 108 stations on the air today, which FCC proudly published a few days ago, is rosy indeed.

• **Panning Out**—A quick rundown shows this: Of the 96 stations on the air throughout 1950 and 1951, 33 switched from red to black. What's more, no station that made a profit in 1950 showed a loss in 1951. The picture for the industry as a whole is just as bright, with revenue streaking from a minus to a big shiny plus: In 1951 the industry earned \$43.6-million before taxes, compared to an over-all loss of \$9.2-million in 1950.

The crystal-gazers have to remember, of course, that from here on in, as more and more stations crowd the airwaves, competition will get much tougher. But however fuzzy the outlines, one thing is clear: Television is expanding at a fantastic rate.

I. It's Up to FCC

There's only one ticket that will get you into TV broadcasting: a permit from FCC to build a station and go on the air. And it's a free ride, if you can get a ticket. That will depend to a large extent on how FCC divvies up the new stations across the country. The commission's chief concern is to parcel them out in a way that will best serve the public interest. To do this FCC has set up an allocation plan. This is what the plan will decide:

- Which cities get how many new stations.

- How many channels are set aside for educational (noncommercial) applicants.

- Whether the channels are in the 12 already established very-high-frequency (VHF) channels, or in the 70 ultra-high-frequency (UHF) channels not yet in use.

- **Critics**—FCC could hardly map out a plan that would please everybody. So it comes as no surprise that the proposed allocation is being attacked on virtually every detail, even though its critics haven't jumped on any fundamental flaw.

Obviously, every applicant wants a VHF channel, since VHF receivers are already in use and UHF receivers aren't.

Some existing stations are squawking, too, as FCC plans to shift them from one channel to another within the present VHF band. The only ones who are crowing are stations that would be moved from a less preferred channel to a technically superior one.

- **Worth the Fight**—Of course, building a new station isn't the only route into TV broadcasting. But there's a good reason for getting your start with a brand-new permit rather than buying an existing station: Existing stations come high; it's cheaper to build than to

buy. Naturally, you can't build a TV station for peanuts. And you have to add in whatever the fight for an FCC license might cost you.

The minimum station, without studio and some other things you'd need, would run you around \$135,000. A high-power station with all the latest technical gadgets would push the price up to \$600,000. Add a plush studio layout, and you can run your investment up into the \$1-million or more range.

But \$1-million can still be dirt cheap. Columbia Broadcasting Co., for instance, about six months ago agreed to buy a Chicago station for \$6-million. Today the same station would be a good buy at \$10-million, experts say.

II. Who Can Build?

There isn't much of a chance that the blossoming TV industry will come into full bloom overnight. It will take years to get as many stations on the air as FCC has permits for. Probably not more than 10 or 20 new stations will get on the air this year, according to Wayne Coy, who recently resigned as FCC chairman.

It takes from six months to a year just to translate a permit into a station. The most optimistic view sees 240 given out by the end of 1952, 560 by the end of 1953. The darkest schedule, perhaps the most realistic, chalks up 120 permits for this year, 80 for next.

There is one big reason for this molasses-like progress. Wherever there are more applicants than permits, hearing will have to be held. This will involve about 90% of the applicants.

III. Who Comes First?

Applicants have one general yardstick by which they can judge how they will fare. That is the order of priorities FCC decides to follow in processing the huge logjam of applications. FCC is likely to give top priority to approving permits for these:

- Cities with no TV at all, starting with the largest ones.

- Cities with a single TV station, again beginning with the largest.

- Cities slated to get UHF stations that already have their fill of VHF stations.

IV. On What Basis?

The big turmoil in deciding who gets permits will come when several applicants start battling for the same permit. In general, FCC will judge all applicants by these basic standards: financial resources, legal and technical knowledge of the business, good plans for programming, a record of public service, and residence in the city concerned. When FCC has to choose be-

tween equally good prospects, these won't necessarily be decisive. But FCC will have the final say, and it's hard to tell which way the wind will blow.

Take FCC's decision on the four Washington (D. C.) channels before the freeze set in. The first three channels were fairly easy to call: National Broadcasting Co. and the Washington Star were just about perfect applicants from every standpoint. That left six or seven contestants for the two remaining channels. One went to DuMont, largely because of its contributions to the industry. The other settled down to an almost flip-the-coin choice between Philco and Bamberger Broadcasting Co., the Macy subsidiary that owned the successful radio station WOR in Newark, N. J. Bamberger got it.

Nobody questions the commission's right and duty to choose between two equally qualified applicants for the single channel. But in Washington, where everybody is looking for the political hook, there are plenty of people who say the reason Bamberger got the channel was that it knew the right people.

There's always the suspicion that, if it can be done without risk, the chips might fall occasionally in favor of friends of the party in power—whether they are Democrats or Republicans.

V. What's Ahead?

All in all, it's a pretty sure bet that by the time all the channels are translated into stations, sets, and audiences, TV will cover the nation in almost the way radio does today. By then there will be some 2,000 stations on the air. And some 30-million TV sets will be in use, compared with 16-million today.

However, television is moving so fast, and will change so much when the thaw sets in, that there's a lot less crystal-gazing than you would expect.

There's no doubt, though, that television will have a tremendous and a far-reaching effect—both on the manufacturing and entertainment ends of the business. Here are a few general developments you can safely count on.

- Manufacturers of transmitting equipment have a huge steady market ahead, as the new stations get their permits and place orders for equipment.

- The TV-set business will also find big new markets—and will retap existing markets again and again with bigger screens, UHF sets and converters, color, two sets in every home, and the like.

- Movie theaters will make their bid to get into TV broadcasting. They aren't sure now that TV is the great big ogre they once thought it was.

- Movie producers, too, are wondering whether TV screens aren't just another whopping new market for films—TV film, that is.

Like Hot Cakes

Public snaps up stock in Schering Corp., as drug house returns to private ownership. Present management stays.

The U.S. investing public last week took Schering Corp. to its bosom. Shares in the till-recently government-owned pharmaceutical house were snapped up as fast as they went on the market.

The quick sale vindicated the judgment of a brokers' syndicate headed by Merrill Lynch, Pierce, Fenner & Beane; Kidder Peabody; and Drexel & Co. The syndicate was top bidder for Schering, taking over the once German-held company from the Alien Property Custodian for \$29,131,960 (BW-Mar. 15/51, p28).

• **Stock Split**—The price worked out to roughly \$66 apiece for the 440,000 shares of Schering stock, compared with a book value of only \$26. However, the confident syndicate promptly split the stock four-for-one and then offered the new shares to the public for \$17.50. The sale was a landslide, with the high price reflecting public confidence in two points:

• That the company will be important in the ethical drug field.

• That the management team in control for the past 10 years should get credit for Schering's past successes. The team has been asked to stay on the job, though the new owners will control the board of directors.

More than half of Schering's 1,200 employees showed how they felt by buying stock.

• **Key Products**—Schering is a long way from being the biggest of pharmaceutical houses, but it is the developer and marketer of several important ethical products: hormones—including cortisone—antihistaminics, X-ray diagnostics, and chemotherapeutics. Two subsidiary companies turn out proprietary products and cosmetics.

In the 10 years that the government has owned it, it has become one of the richest of seized alien properties, second only to General Aniline & Film Corp. There has long been pressure on the government to sell Schering; rumors have had it on the block for six years.

• **Prewar**—The present rosy picture is a big change from the one that Schering presented in 1941, when it first came under the government's critical eye. U.S. officials found that, as a subsidiary of the German Schering cartel, the U.S. outfit was supplying American-made drugs to German subsidiaries in South Africa and South America. The U.S. branch apparently

hoped to ride out the war under phony Swiss ownership. Net sales that year were under \$3.5-million—chiefly from sale of hormone drugs.

In 1942 the Alien Property Custodian took over all shares of common stock and lopped off all executives suspected of German sympathies. That eliminated the president, comptroller, sales manager, and chief engineer. The American management that took over found these initial problems:

- Paying off debts.
- Setting up research labs.
- Expanding sales in the U.S.

The company had been covered by German patents and knowhow. Now it had to do its own research. At the same time, it started a program of expansion that's still going. No dividends have been paid since 1942.

In the next 10 years annual sales jumped from \$3.5-million to more than \$15.5-million. Development of antihistaminics, and of cortisone in the hormone field, boosted sales. Schering went into foreign markets. It purchased foreign subsidiaries that were also being held in custody and established new ones, for export of bulk, packaged, and raw materials. Foreign sales now are more than six times the 1941 figure.

• **Straitjacket**—The management of Schering is delighted with its new owners. It's no easy job to run a company when every move, from foreign investing to hiring executives, must conform with government policy. The restraint put on Schering-held patents was typical: By agreement with the Attorney General, all patents and patent applications originating before 1942 are held by the Attorney General to be issued royalty free to any applicant. All patents issued during the last 10 years are held by Schering, but must be made available to anyone who's interested, for a fair royalty. The drug business is tough when your competitors can use all your patents.

Future operations of Schering will still be limited to some degree by such contractual obligations as leased patents. But the governmental spotlight is off.

• **Getting Bigger**—On Schering's drawing boards is a \$2-million expansion program for the next two years. Increased plant space will be used for greater production of Cortogen—its brand of cortisone—for its sleeping pill Dormison, and its peptic ulcer drug Prantal. Also in the works is a Schering version of the anti-tubercular drug to be called Ditubin. Schering announced this week that it is handing out 3-million Ditubin tablets to 250 American and Canadian hospitals for experimental work. The drug is the same unpatentable chemical compound used by Hoffmann-LaRoche and Squibb (BW-Mar. 1/52, p22).

More Metal

Mobilizers take a tentative look at the third quarter, decide that civilian industry can have more materials.

Consumer goods manufacturers are over the hump on materials shortages. They'll get bigger government allotments of steel, aluminum, and copper from here on.

In fact, the limiting factor in the second half of 1952 probably won't be the supply of materials, but industry's ability to sell what it can make.

You can see this from the tentative estimates of third-quarter allotments that the mobilizers drew up this week.

• **New Schedules**—Only a few months ago Washington was warning manufacturers that metals allotments in the third quarter of this year would be every bit as tough as for the July-September quarter. It was possible, but not probable, there would be a little more metal after Oct. 1.

But that was before the armed services had translated the stretchout of arms production into terms of how much metal they would need, and when. The new look of their metals needs changed all previous signals on the outlook for consumer durables.

On the basis of the new estimates, the second quarter remains the leanest, metals-wise, for civilian goods—but even it won't be so lean as anticipated. And each quarter henceforth will be fatter.

Here is how the average allotments for consumer durables shape up in percentages of pre-Korea supplies:

	4th qtr. 1951	1st qtr. 1952	2nd qtr. 1952	3rd qtr. 1952 (Est.)
Steel	58%	50%	50%	60%
Copper wire ..	54	40	35	40
Foundry copper and brass ...	54	35	30	40
Aluminum ...	46	35	30	40

Actually, consumer goods production hasn't been hit so hard as the figures suggest. They don't reflect the inventories held by many manufacturers when CMP went into effect. Nor do they take into account substitutions.

• **Less Demand**—Even so, production obviously has fallen off. The drop probably shows up in clearest focus in the Federal Reserve Board indexes of production (BW-Mar. 8/52, p42). Some officials insist that the drop in consumer demand was as much to blame as materials restrictions. They point out that production of most consumer goods hit a peak in the closing months of 1950 or shortly thereafter, then began tapering off. That was weeks before military ordering began to preempt substantial amounts of metal.



Businessmen: Moving Right Along—But

Business is being done today in an atmosphere of gloom and anxiety. Talk to top businessmen anywhere in the country, and you find them more worried, oppressed, uncertain about the future than they have been at any time since the immediate post-Korea war fears died down.

Last week BUSINESS WEEK sent its reporters out to sit down with a cross-section of American businessmen. They found a startling wave of gloom has swept over the business community.

This doesn't necessarily prove there's trouble ahead. The executives don't agree on the threats they fear. Some—inflation, deflation—are mutually exclusive. But the frame of mind itself is important business news, a clue to the way businessmen will react to whatever does come along.

• **Compulsive Expansion**—As you'd expect at this time of year, tax worries are universal. But not just griping at the load; more often, it's serious foreboding

about the effect on future capital needs, expansion.

And back of that is the basic anxiety—the sense that the only way things can keep going is to keep expanding. The average businessman feels he's doing business like mad and just keeping barely ahead of taxes and costs. And he has a feeling something may break under the strain any moment.

• **Anxiety in Spots**—The survey shows that this apprehension is unevenly distributed among regions of the country, among industries in different classes. Generally speaking, the least pessimism is shown by the Midwest and Far West, the most by New England, with the Middle Atlantic and South between.

Industrywise, jitters are worst in textile, apparel, jewelry, fertilizer, and scrap paper industries. A host of other industries are spottily worrisome: steel, autos, appliances, housing, home furnishings, farm products, machinery, retailing, and insurance.

Among business' specific problems two of the three leading worries are in the cost category: (1) the tax burden, (2) rising labor costs. The third is the marketing problem: Where can we get more orders?

• **Profits Squeeze**—Look at almost any annual statement, and you can see how higher taxes and higher operating costs have cut the heart out of heavy sales. Businessmen aren't just worried about the pinch on profits; they wonder where they'll get capital for expansion.

"Of course, we can get a rapid tax writeoff of building and equipment, and there are RFC loans," said one West Coast aircraft executive. "But is it a good idea for the government to be the only source of investment capital?"

"Taxes take everything but the bricks and mortar," the president of a New York optical company said. "Smaller companies are left with no reserves . . . it endangers our future."

Several executives warned that divi-

haunted

dends currently are living on the fat of capital investments made at former lower levels of cost. They foresee a shrinking of dividends as taxes and labor costs hit harder, as reserves are eaten up, as postponed investment in plant becomes desperately urgent despite forbidding prices of construction and equipment.

"And don't forget," said a Midwest truck manufacturer, "that the dividend dollar has depreciated, too, in the past 10 years while the dividend level has stayed on an even keel."

Businessmen are vocal, of course, about their immediate profit worries. That's where they get their worst squirrel-cage feeling.

"Whether I make money depends on whether I can maintain volume," an Ohio appliance distributor told a BUSINESS WEEK reporter. "We used to break even on \$40,000 a month—now it takes \$125,000. And, boy, when volume starts falling off, we can go from

black to red so fast I don't think anybody could duck it."

• **Labor Squeeze**—In the labor field, businessmen complain of (1) rising payroll costs, (2) shortage of skilled labor, and (3) a lackadaisical attitude on the part of labor.

The first two are tied together in many cases. Civilian industries find they can't get workers unless they meet higher wages paid by defense plants. And the shortage of labor boosts payroll in relation to productivity: You have to hire a lot of inexperienced workers who can't produce up to the standards of even the minimum wage you have to pay.

High wages cut two ways. They hurt sales by pushing up prices, and they eat up the profit on the sales the company does make. A New England wallpaper manufacturer lays his poor sales showing partly to the "exorbitant" wages that paperhangers are demanding.

The labor shortage isn't confined to skilled workers by any means. One Buffalo company said it's harder now to get stockroom boys and wrapping crews than it was in World War II. It's partly the draft, partly the lure of big money in defense plants.

• **Incentives**—Lack of incentive comes in here, too. A Salt Lake City retailer said: "It's hard to find people who want to get ahead in business. They want security, not advancement. We pay well, but we don't get our money's worth. Too many people are indifferent about the kind of job they do."

"This attitude has been growing since the war," says a Seattle manager. "Men want to jump from a starting job to a job of complete security in a couple of years. In the old days, a man starting out might buy an old house and a clunker of a car; now, after a year or two a young fellow thinks he has to have a Buick Roadmaster, a brand-new house, and a television set."

A Massachusetts businessman points out that taxes, the old bugaboo, must share blame for the lack of incentive to work. "I can't get my people to work overtime any more," he says. "They say that what's left after taxes isn't enough to warrant spending a Saturday in the plant."

• **Squeeze on Orders**—The specter of a deflation symptom in the midst of inflation was raised by many more companies than in recent surveys.

"The only worry I have right now is a shortage of customers," said an Ohio department store executive. "Sales are still headed down," a Midwest maker of leather goods agreed. A Seattle trucking company is preparing for the big sales push it figures will soon be needed. Appliances and textiles are in a sales slump right now.

Downtrends in sales look ominous

when the profit margin is so narrow. "Keeping our volume up makes the difference whether we operate profitably or not," a Missouri appliance maker said. A West Coast executive predicts large-scale bankruptcy if volume slides while the tax pressure is still on.

• **Squeeze on Managing**—In the management field the worst hurdle cited by businessmen is confusion over materials controls. The supply problem itself is evaporating, except in a few spots, but management finds it impossible to do any long-range planning without assurance of what's going to happen to the controls.

"I'm just back from Washington," said a New England toolmaker, "trying to find out whether we're really in a defense economy or not. And I didn't find out. Washington is muddled worse than I am."

• **Top Manpower**—While most companies find the materials situation easing, they see no letup in the competition for experienced management men. One Chicago company was especially hot about salary restrictions, having just lost two key executives to rival companies that offered triple the salary.

"It seems there are absolutely no limitations on what you can offer a man coming in to fill a job," the company president said, "but you're stymied within your own organization."

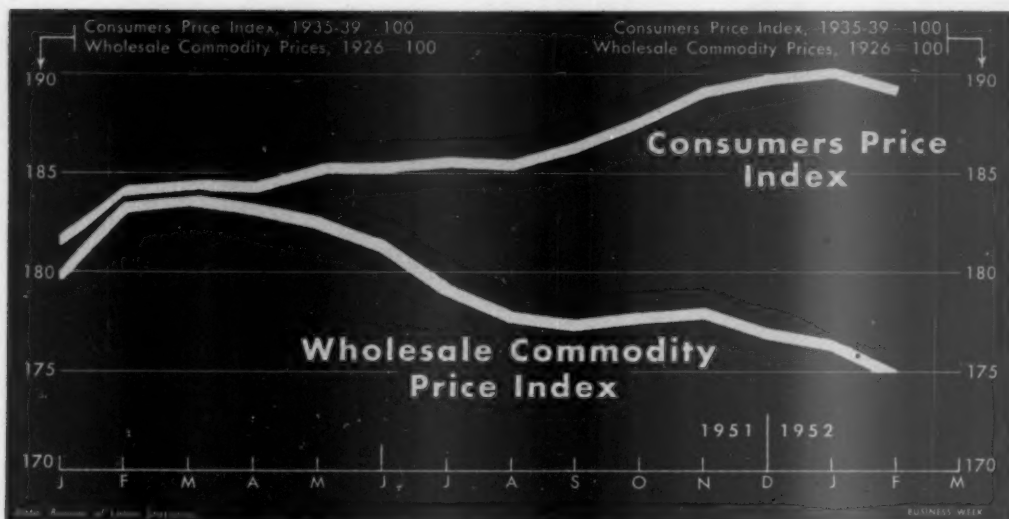
• **Heart of the Economy**—Underlying all the squawks about specific worries was the widespread doubt about our national health. Part of this was the businessman's long-standing distaste for the political climate of the country. But part of it was something more.

"The economy of the country is thoroughly rotten," a Pittsburgh executive declared flatly. A Seattle retailer put it this way: "Everyone is working, everyone is eating, but we are not building anything, not creating those things that expand the economy."

Government control of business was the favorite whipping-boy of the executives who see small hope for the nation's economy. "We businessmen aren't running the business any more," a Wisconsin manufacturer grumbled. "We're told what we can buy, what we'll pay for it, whom we will hire, and how much wages we'll pay."

There are still some optimists, though, and not just those who think their views will prevail at election time. An executive in the aircraft business in Los Angeles said:

"We've conquered so many obstacles that were supposed to be real stumbling blocks that I don't know if we should confess to having any worries. Last year we got workers when they were supposed to be tight; we got materials; we scrounged machine tools. We'll come out on top again."



Price Key Opens First Door to Decontrol

A plan to end price ceilings was given a quick scrutiny by top stabilizers this week. They hoped it would head off supporters of a rigid decontrol formula in the new defense act.

The plan will be announced by Office of Price Stabilization in a few days, unless it hits an unexpected snag. Officials who drew it up hope it will be in operation to some extent within 30 days. They think it will convince Congress that nobody can take ceilings off so expertly as the people who put them on.

• **Forewarned**—So far the OPS plan confines itself to broad principles. But it is detailed enough to show business what it can expect from the controllers turned decontrollers—if they win their point with Congress.

One thing is clear: OPS has no intention of wiping out price ceilings altogether on any product. The most the plan foresees is a suspension of controls for some products, with ceilings held in the background, ready to be clamped on again in case prices start going up.

• **First Test**—The big key to the OPS formula is price: A below-ceiling price is the first and indispensable requirement. But a below-ceiling price, alone, is not enough to qualify a product for decontrol. Many other factors will be considered almost on an individual-case basis.

To qualify within the broad framework of price, a product must first of all be priced substantially below its 1951 high, OPS says. Even though the plan refuses to define "substantial" in

terms of dollars and percents, this automatically puts some lines in a favored position. One of them is the soft goods industry. Woolens at wholesale, for example, are close to pre-Korea levels. Fats and oils are in the same position. Wholesale cotton goods prices started down in February and have dropped enough to make some cotton goods lively candidates for decontrol. Among consumer hard goods, TV sets, at 10% or more below their high, are the likeliest prospect.

• **Not a Chance**—Even though OPS doesn't say how substantial the drop must be, a price anywhere near the 1951 high means a product won't have a chance of getting out from under ceilings. This bars automobiles, electric refrigerators, washing machines, vacuum cleaners, radios, and most other consumer durables.

On this basis, most building materials won't qualify either. Prices in some lines have weakened, but not enough to meet probable OPS standards. Lumber prices, for example, began to fall recently. If the downtrend were to continue, then OPS would give it a look. But as long as materials stay above or near their 1951 highs, officials figure the basic demand is too strong to justify decontrol.

• **Maybe**—Even when OPS is satisfied that a price is substantially below ceiling, it will not order a suspension if there is a prospect of a rise for seasonal or other reasons. That will bar a lot of products. Pork chops, for instance, are well under ceilings. But they are expected to rise seasonally. So they

are out as far as the OPS plan is concerned. On TV sets, however, no seasonal factor is involved, so they are likely to meet the price qualification, on the basis of present prices. So would women's nylon hose and percale yard goods. In these cases, OPS would have to decide whether some other factor might run up the price if ceilings were removed.

• **More Tests**—Once a product qualifies on these considerations, it must pass still other tests. One is how easily OPS can keep track of price movements when the ceiling is suspended. The easier the job, the likelier a product is for decontrol. This means that products such as wool and cotton, with regular public markets, say, will have an easier time than wearing apparel.

Another important factor in the OPS formula is selection. OPS won't hesitate to reach into a complicated price structure from raw material to finished product and decontrol at one phase only.

Leather, for example, is cheap. Prices generally are lower now than they were before Korea, and they are 25% below ceilings. That makes leather a logical candidate for decontrol. But retail shoe prices are only 2% or 3% below ceilings. That puts them in a doubtful category.

• **Take Exception**—The stack of exceptions and special qualifications in the OPS decontrol version won't sit well with Congressional supporters of early decontrol, many of whom hanker for a compulsory over-all formula. But OPS insists it can't very well clamp a

rigid formula over the thousands of prices it administers. And it predicts that Congress will fail if it tries to write one.

OPS found it was impossible even to write a plan that would cover one entire industry. For example, pressure has been heavy for a decontrol plan that will include all soft goods, from raw materials to finished goods. What OPS wanted was a formula that would bring back controls quickly, if prices should rise. Raw materials prices could be watched in open markets. But it was a different story for finished products, where thousands of prices are fixed by individual agreement. As a result, finished goods will have a harder time getting decontrolled than raw materials will.

• **Best Foot Forward**—The plan OPS has finally come up with was worked out by a special decontrol committee headed by Edward F. Phelps, assistant director of OPS in charge of price operations. It is now in the laps of Ellis Amall, OPS administrator, and Roger Putnam, chief stabilizer. They'll pass it on to Congress as soon as they are satisfied it puts OPS' best foot forward when it comes to lifting ceilings.

Less Nicotine . . .

. . . in filter-tip cigarettes, says P. Lorillard, which is bringing out a new filtered cigarette, Kent.

Last year the biggest sales gain made by any cigarette among the top 15 brands was made not by a cigarette that was longer, shorter, or more firmly packed. It was made by Brown & Williamson's Viceroy (BW—Jan. 5 '52, p72). What Viceroy has that other cigarettes don't have is simply a filter at one end. It also had its second 50% gain in a row.

• **Well-Taken**—The lesson was not lost on the tobacco industry, at least not on P. Lorillard Co. Last week it introduced a filter-tip cigarette of its own. The name is Kent, after Herbert A. Kent, president of the company.

Lorillard makes big claims for its new offspring. The filter material was developed for gas masks during the war, is now used to remove radioactive materials from the air at atomic plants.

Lorillard says it "removes seven times more tars and nicotine than any other cigarette."

• **Out on a Limb**—One interesting thing about the advertising claims: Lorillard is willing to push them at the risk of damning, by inference, its nonfiltered cigarettes.

Lorillard's willingness to go out on this limb shows how strong a groundswell is developing against the smoking habit.

• **Signpost**—Another indication of the trend is the growth of the king-size cigarettes. These had the biggest gain of all last year—36% over 1950. One reason is that cigarette makers advertise that the extra tobacco acts as a kind of filter.

Today there are about eight brands of filter-tip cigarettes on the market.

Viceroy, the biggest seller, will hit about 3-million in sales this year, which will make it tenth among all brands.

Viceroy sells for about 24¢ in the New York area; Parliament (the No. 2 filter tip), Columbia Tobacco's Du Maurier, and other filter-tip cigarettes are in the premium-price class—about 30¢ for Kents and about 33¢ for Parliaments.

Premium price is another lure for manufacturers. Besides, they think ceiling prices on regular cigarettes will soon be raised to about 25¢, which should remove some of the price disadvantage felt by the filter tips.



Snappy—But You Can't Buy It

West German industry is elbowing its way back into a field where it once held a very high place: the extra special, high-cost, precision-tooled, virtually tailor-made automobile.

Daimler-Benz, long a leader in the field, has come up with a new product that will win more publicity than profits for the company. That's because its latest model (above) is for sports car racing only; it

isn't going to be put up for general sale.

Called the 300 SL (that means super light, which is what the car is), the two-seater has a streamlined body, featuring an upward swing door, somewhat akin to an airplane. Power is supplied by a 175-hp., six-cylinder motor, scheduled to provide speeds upwards of 125 mph. The cylinder capacity of the 300 SL is relatively small, 3,000 cc.

Stretchout Gives a Lift To Builders, Electricity

Things are looking up for the construction industry, and for electric power. They'll be among the first to profit by relaxed metals restrictions following the mobilization stretchout.

Industrial construction, once gripped by some of the tightest restrictions, is chortling as mobilization officials seriously discuss decontrolling most types of steel and aluminum by early next year, and maybe sooner. Meanwhile, the builders have a bird in the hand: a step-by-step procedure has been announced for removing most controls on construction, starting in the third quarter.

First move will be approval of applications for industrial projects, some of which had previously been denied. By the fourth quarter all building except amusement and recreation may be proceeding at normal rates.

The electric power expansion program also got a nice boost from the stretchout. Last week Defense Production Authority raised its 1952-through-1954 target from 30-million kw. to 32-million kw. (BW—Jan. 12 '52, p24).



THE ROADS are full of cars already. And so dealers, with larger allotments in sight, are beginning to wonder . . .

If More Cars Come, Will They Sell?

Six months ago, when it looked as though military demands would hold 1952 automobile production below 4-million cars, dealers all over the country were pulling long faces.

That would be a miserable level of production, they said. It wouldn't be high enough to continue the big volume business they were used to. And yet it wouldn't be low enough to bring the kind of sellers' market in which the customers grab what they can get and are grateful.

• **More Materials**—Now, with Washington loosening up on materials, it is obvious that 1952 production can run well over 4-million. Optimists are beginning to see output reaching as high as 4.5-million cars for the year. But the dealers aren't doing much cheering. They're wondering if they can sell all the cars Detroit is ready to give them.

• **Survey**—To find out just how the auto market stands, BUSINESS WEEK reporters this week talked to dealers in leading cities all over the country. They found that the picture varies from city to city and even from dealer to dealer. But what most of the dealers said boiled down to this:

The car business is O.K. with present dealer allocations. If the allocations go up for any length of time, it will take real selling—hard selling—to move the added cars.

A Midwest Chevrolet dealer took a dim view of the prospect. "With bigger allotments," he said, "everyone would start cutting margins to move cars. We'd end up selling more cars and doing more work, for about the same amount of profit as now."

• **Plus and Minus**—There is one immensely reassuring thing as the dealers

see it: Inventories are just about down to bedrock. Automotive News this week estimated the total inventory at 246,516, a mere 5.5 cars per dealer and the lowest figure since the start of 1946.

But against that favorable statistic, you have to set two ominous facts:

(1) Prices are high. Or at least the potential customers think they are.

(2) Credit is tight. The government regulations on instalment sales make it hard for the dealers to do business with anyone in the lower or middle income brackets.

• **High Prices**—Even the cheapest cars are priced at a level out of the reach of a lot of people. From city after city comes the report that former buyers of medium priced cars are being downgraded to the Ford-Chevrolet-Plymouth level. The benefits for this trio, though, are canceled out by the fact that a large number of their former customers are being shoved down into the used car market.

There's one outstanding exception to this downgrading. There is still a strong demand for cars at the very top of the market—especially Cadillacs. With Caddies recognized as symbol of success, they're being ordered far faster than they're being made. Some of Cadillac's high-price competitors aren't happy, though: A lot of people are waiting for Cadillacs rather than accepting a substitute.

• **Credit Restrictions**—Dealers everywhere say that Regulation W—which prescribes the terms of instalment sales—is gnawing great holes in their business, actual and potential. Complaints against the required down payment are half-hearted; it's the 18-month limit on payments that keeps possible customers

in the window-shopping class. A Willys dealer in Texas put his finger on the trouble. "A white-collar worker making \$275 a month finds himself with \$1,100 to pay on a moderate-priced car, after deducting his trade in. That leaves him \$77.90 a month to pay. He can't afford it."

Generally, the dealers say they would be happy if payments could be spread over 24 months.

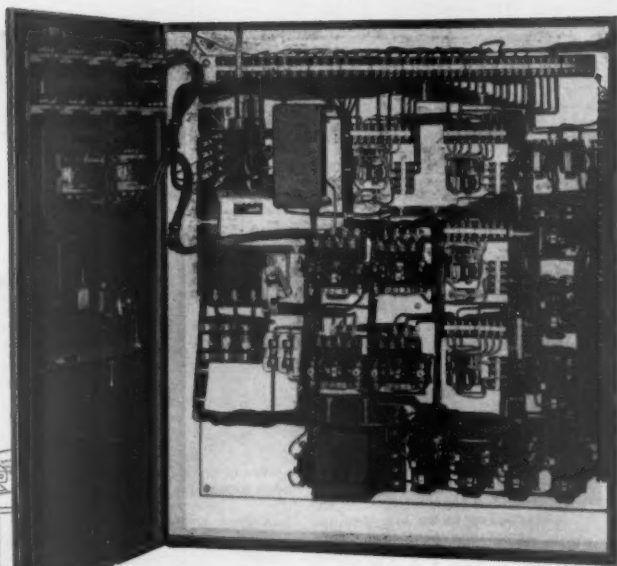
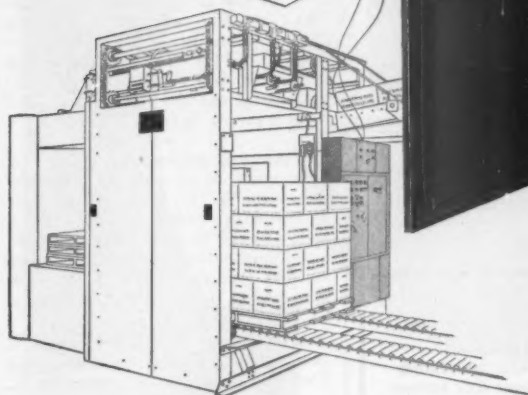
• **Easier Terms**—There are no signs that Detroit is thinking in terms of lower prices. But dealers hope that credit rules may be eased later in the year if too many cars begin to back up in the merchandising feed pipes.

As a lot of dealers see it, what happens to Regulation W will pretty well determine what sort of year they have. With easier regulations on instalment sales, they think they can move all that Detroit can make. With the present restrictions, they will have to hustle to sell what they are getting now.

• **Independents Squeezed**—As usual in a somewhat sticky market, it is the independents who are getting the worst of it. GM, Chrysler, and Ford dealers generally feel happier about the market than their competitors.

Some of the independents suspect that a large part of their losses may be going to Ford. In any case, Ford dealers are crowning at the success of the company's gamble on remodeling in a year when everyone else stood pat. A Ford dealer in San Francisco voiced the general joy when he was asked what he'd do if somebody told him that he would get a bigger allotment and have to sell a lot more automobiles. "I'd fall on his neck and kiss him," caroled the dealer.

Factory Equipped
with
Allen-Bradley
Solenoid Controls



Close-up of control panel showing Allen-Bradley controls which operate the Alvey Pallet Loading[®] Machine, manufactured by the Alvey Conveyor Manufacturing Co., of St. Louis, Missouri.

® Patent applied for

Alvey PALLET LOADING MACHINE operated by Allen-Bradley Controls

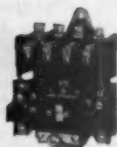
The Alvey Pallet Loading Machine methodically receives individual packages and automatically arranges them on a pallet in a predetermined pattern, with the required number of tiers. Controlling the precise operation of this machine are Allen-Bradley motor controls.

Manufacturers of machines purposely select Allen-Bradley controls because they are trouble free. Allen-Bradley solenoid controls have only one moving part. There are no troublesome links, levers, pins, pivots, or bearings to corrode, stick, or break. Likewise, double break, silver alloy contacts are maintenance free. Make Allen-Bradley controls an integral part of your equipment.

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Universal Relay



Bulletin 709
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Bulletin 800T Oiltight
Push Button and Selector Switch



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The steady expansion of Mid-West Industry induced Arabol to build—in 1921—the largest factory west of New

We operate on the belief that, for each particular adhesives application, there is one adhesives formula that can serve you best.

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CASE SEALING
DRINKING CUPS

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PIPE LAGGING

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BUSINESS BRIEFS

Price cuts hit the bogged-down TV receiver market this week. Reductions of \$20 to \$90 were announced by General Electric, Merson, and Muntz.

A special federal court granted the National Assn. of Manufacturers a permanent injunction to bar prosecution under the Federal Lobbying Act. The court held parts of the law to be unconstitutional, other parts too vague.

The New York legislature cleared the way for the Long Island Transit Authority to take over and operate the bankrupt Long Island Rail Road (BW—Sep. 15 '51, p. 152). The authority is first directed to try to find a private operator, but it can also run the line itself until a private buyer is found.

Pan Am was ordered by a New York state court to arbitrate its controversies with W. R. Grace & Co. over their jointly owned airline, Panagra (BW—May 19 '51, p. 20). The partners' latest squabble was over Pan Am's move to oust Andrew B. Shea, first vice-president of Grace, as head of Panagra.

Atomic energy for electric power is being studied by Detroit Edison and Dow Chemical in joint experiments.

Long-haul truckers must pay New York state's weight-distance tax (BW—Oct. 27 '51, p. 134) by the end of March. The state's highest court vacated a stay that kept the tax commission from collecting, but a final ruling on constitutionality of the tax isn't expected till next month.

The first direct air freight service between New York and New Orleans via Baltimore and Atlanta was inaugurated this week by U.S. Airlines. . . . CAB granted New York Airways, Inc., a certificate for mail and passenger service by helicopter in the New York metropolitan area (BW—Jan. 5 '52, p. 28). Mail service is slated to start late in 1952, passenger service later.

Gov. Murray of Oklahoma is pushing plans for four-state toll superhighways to link St. Louis with Denton, Tex., by way of Kansas City and by way of Joplin, Mo. Oklahoma, Missouri, Texas, and Kansas would raise \$600-million through revenue bonds for the 1,331-mi. road.

The search for higher yields: New York State's legislature this week passed a bill permitting savings banks to invest in common and preferred stocks.



Saving Ground Time in Mid-air . . . with the Sperry *Engine Analyzer*

► Now Northwest Airlines saves ground time in mid-air! With the Sperry Engine Analyzer installed on all Northwest Airlines' Stratocruisers, flight engineers can get a continuous visual analysis of each engine's performance *while in flight*. Graph-like patterns on the Analyzer scope locate and identify irregularities in power plant operation.

► Upon landing, flight log information directs maintenance crews immediately to those parts that require servicing . . . avoids prolonged engine running on the ground.

Result: Northwest Stratocruisers spend more time in the air—less time on the ground.

► Sperry's Engine Analyzer is the first complete instrument provided for aircraft to isolate detailed engine difficulties. This instrument pays for itself in a matter of months. Aside from saving ground maintenance time, it also enables the flight engineer to maintain proper operating techniques at all times

. . . prevents unnecessary component replacements.

► The Sperry Engine Analyzer reflects this company's many years of experience in the precision manufacture of instruments designed to aid aviation.

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MARKETING



RICHARD WEIL, backs down the executive ladder, and . . . JACK STRAUS takes over as top dog. It raises the question . . .

Where Does Macy's Go From Here?

There are plenty of theories going the rounds to explain why Richard Weil, Jr., suddenly "relinquished" his job last week as president of Macy's New York. Most insiders put a good deal of blame on Weil's tactless handling of people, his sense of intellectual superiority. Others think the fault lay partly in intramural Macy politics. Still others think that the recent caustic profile of Weil in the *New Yorker* had a bearing on the affair.

Though these are undoubtedly contributing factors, they cloud somewhat the central issue, which lies much deeper. It is simply this: Macy's New York, under Weil's leadership, continued to lose its dominant position in the merchandising world. It is falling behind the times.

• **Declining Profits**—Because of the sheer size of the Herald Square store and also because the R. H. Macy & Co. chain of stores as a whole keeps turning in bigger sales figures every year, it's hard to grasp what is happening to Macy's. The main clue lies in the profits figures, which have been declining more rapidly than those of other department store chains for some time (BW—Mar. 15 '52, p. 26).

How much of this has been Weil's

fault is not clear. The Macy clan are a tight-mouthed lot of executives who don't talk out of school. Besides, except on the very top level, they haven't got much to talk about, thanks to the way Macy's is "administered by edict," as one former executive puts it. Nevertheless, these things are clear: (1) that Macy's New York provides the bulk of the chain's income from retail operations (80% in 1950, which was the last year in which the annual report gave the branches separately); and (2) Macy's was slipping, and Weil failed to halt the erosion.

• **Twin Principles**—What's been happening to Macy's only begins to emerge when you take a backward glance at the store's development and then note what has occurred in retailing over the past decade.

Macy's grew great on the twin principles of price and volume. Over and over, it has hammered home the idea that it undersells everyone else. It made good its boast in the old days by selling private brands below the price of name brands, by buying in huge bulk, by selling for cash and saving the expenses of credit.

This was just the ticket for the 1930s, when people went a long way

to save pennies. Macy's great merchandising principles made it the world's greatest store.

• **Changing Times**—But times have changed since the 1930s. This is an era of inflation, high income, full employment. Price is no longer the primary appeal that draws people to department stores. The fact that people can save as much as 10% of their expendable income today shows the nature of the age.

As a result, department store competition in particular has centered more and more on such incidental values as style, service, convenience, and design, rather than on price. The other great mass-merchandisers—the Abraham & Strauses, the Bloomingdales, the Gimbels—have upgraded themselves. They carry broader stocks, higher-priced goods (BW—Dec. 1 '51, p. 48).

Furthermore, the trend toward decentralization dragged a lot of lucrative business out into the suburban stores.

These trends were obscured right after World War II. They were there, but you couldn't see them because anyone could make money when the sellers' market was still going. It wasn't until about 1949, when Weil took over



How many Paperwork Pirates on your payroll?

MORE than you think. For behind every clerical worker lurks the Paperwork Pirate—symbol of waste, inefficient methods—ever ready to get on the payroll.

The Paperwork Pirate thrives on clerical costs, confusion and unnecessary overtime. The more hours your employees spend copying business data such as names, codes, dates, descriptions, rates, the better he likes it. Such repetitive writing must be done in nearly every department of your business, but you can do it more efficiently with Addressograph methods.

With Addressograph this data is written once on a metal plate—checked for accuracy—and from then on you get error-free transcriptions on any kind of form or any place on a form, compact or spread

over a broad area, 30 to 50 times faster than ordinary methods. With new Addressograph Accounting models you can handle repetitive figure data in the same way, automatically getting journal tabulations and accounting totals.

The Addressograph way is the way to tackle your repetitive writing and accounting problems. Watch your costs drop, your overtime hours decrease, your production level increase. This is the way thousands of companies, large and small, are cutting clerical costs in the factory as well as in the office.

Let the Addressograph man show you how to reduce costs of writing repetitive data. Call your local Addressograph office or write Addressograph-Multigraph Corporation, Cleveland 17, Ohio—Production Machines for Business Records.

© 1955 A-M Corp.

Addressograph-Multigraph

Simplified Business Methods

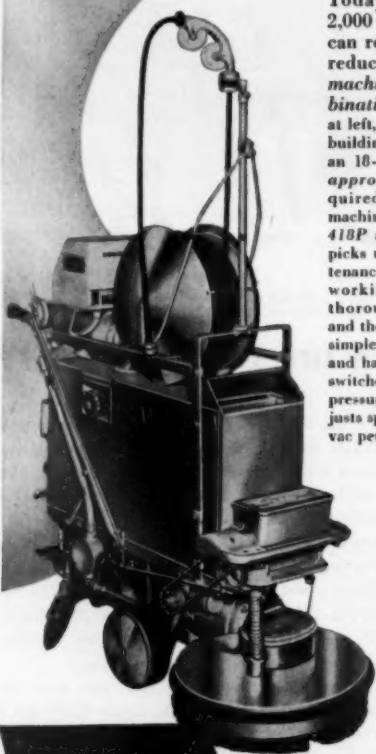
SERVING SMALL BUSINESS - BIG BUSINESS - EVERY BUSINESS

SMALL-AREA BUILDINGS...

Save $\frac{2}{3}$ of Every Hour
of Scrubbing Time

WITH A

COMBINATION SCRUBBER-VAC!



Also can be used
for dry work—steel-
wooling, et cetera

Today, even buildings with but 2,000 to 15,000 sq. ft. of floor space can reap the labor-saving, cost-reducing benefits of combination-machine-scrubbing. Here's a Combination Scrubber-Vac, Model 418P at left, that's specially designed for such buildings. This Scrubber-Vac, which has an 18-inch brush ring, cleans floors in approximately one-third the time required with a conventional 18-inch machine and separate vac unit. Model 418P applies the cleanser, scrubs, and picks up—all in one operation! Maintenance men like the convenience of working with this single unit... the thoroughness with which it cleans... and the features that make the machine simple to operate. It's self-propelled, and has a positive clutch. There are no switches to set for fast or slow—slight pressure of the hand on clutch lever adjusts speed to desired rate. The powerful vac performs efficiently and quietly.

Finnell makes Scrubber-Vac Machines for small, vast, and intermediate operations, and in self-powered as well as electric models. From this complete line, you can choose the size and model that's exactly right for your job. It's also good to know that you can lease or purchase a Scrubber-Vac. For demonstration, consultation, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 3803 East St., Elkhart, Ind. Branch Offices in all principal cities of the United States and Canada.

Conserve Manpower with
Completely Mechanized Scrubbing

FINNELL SYSTEM, INC.

Originators of
Power Scrubbing and Polishing Machines



BRANCHES
IN ALL
PRINCIPAL
CITIES

"... the other stores were willing to get in and slug it out with Macy's ..."

MACY'S starts on p. 32

at Macy's, that the strains and fissures began to show up in the older forms of merchandising.

• **Old Tricks Don't Work**—The key to the Macy situation is that it can still get greater volume—but only at an added cost. Greater volume alone is no longer a guarantee of a stronger market position.

The recent price war, touched off by Macy's last summer, is a good example of what this means on a practical level. The price war was Macy's big bid to retrieve the price leadership it had lost during price controls and shortages. In a way, Macy's had to make some such dramatic bid. Under fair trade, it had been undersold continually by small appliance stores.

But there has only been one price war to date, and there's no sign of another. It was an expensive way for Macy's to gain volume, mainly because the other stores were willing to get in and slug it out with Macy's, matching the big store price cut for price cut.

• **Saturation**—What's happened in the past decade or so is that Macy's costs have risen to the point where—despite its volume—it no longer has a clear-cut advantage over other stores. Here are some of the major areas in which Macy's costs have gone up:

• **Delivery costs.** Macy's encourages—and gets—a terrific volume of C.O.D. orders, which are the most expensive type of delivery because of the red tape involved.

• **Physical plant.** The Herald Square store is an old and inefficient plant.

• **Credit business.** Macy's may not have charge accounts as such, but it writes a lot of instalment contracts and it lets people overdraw their depositors' accounts (D.A.'s), which operate like checking accounts.

• **Labor costs.** Macy's is now generally credited with having the highest labor costs of any New York store.

Weil's trouble seemed to be that he couldn't bring these costs down. Perhaps no one can. But Weil, in the eyes of some people, compounded his problems by increasing costs in at least one area, namely labor. This is one area, insiders say, that Weil took unto himself, dealing first hand with the CIO union at Macy's. His critics say that the price of his interference with the normal processes of labor relations was (1) higher hourly rates than other stores; and (2) rigid rules that prevent Macy's from using flying squads of



Clerical help comes high these days

WHEN INFLATION HITS THE OFFICE it can deal a low blow to fact-hungry management.

It takes *people* to assemble facts and produce them in enough quantity in enough *time* to steer executive decisions in the right direction. It doesn't necessarily take a *lot* of people, but it does take *effective* people.

To make office help more effective requires aid in the form of flexible, modern record-keeping methods. To more and more executives in every kind of business, that has come to mean McBee Keysort.

With your present personnel, without costly installations, Keysort cards and machines provide accurate, useful management controls at less cost than any other system. When notched, the pre-coded holes along the edges of the

Keysort cards make it easy to collect a wealth of data... *classify* it... *summarize* it... *file* it... *find* it... *use* it... quickly and accurately.

Any girl in the office can learn the Keysort system without special training. That means absenteeism doesn't hold up work. It also means the girls can double up on rush jobs and level off peak work periods.

By speeding the flow of production facts, sales facts, inventory facts, *all* the facts of business life, Keysort is saving executives not only time, work and worry, but *money* as well.

That's why McBee sales have multiplied *tenfold* in just a few short years.

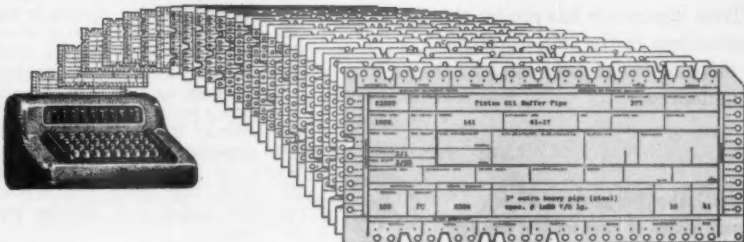
The trained McBee representative in your city can tell you frankly whether or not McBee can help you. Ask him to drop in. Or write us.

THE McBEE COMPANY



Sole Manufacturer of Keysort—
The Marginally Punched Card
295 Madison Ave., New York 17.

Offices in principal cities.
The McBee Company, Limited,
11 Bermondsey Road, Toronto 13





How to put your dealers in this sales spotlight

NATIONAL TRADE MARK SERVICE in the 'yellow pages' of the telephone directory puts the sales spotlight right on your dealers.

Here's concrete evidence: In a survey of 4750 dealers made in 100 communities in 36 states, 91% said Trade Mark Service was valuable as a sales builder—that they wanted manufacturers of branded products to continue offering this dealer identification plan.

Dealers think so well of Trade Mark Service that 91% also voted to have manufacturers' national advertising use tie-in references referring readers to their dealer listings in the Classified Telephone Directory. This helps localize national advertising.



Dealers are strong for Trade Mark Service. Why? Their experience has proved that it really puts them in the sales spotlight... that it helps build business right in their own communities.

For further information, call your local telephone business office
or see the latest edition of Standard Rate and Data.



"... A lot of criticism centers on his tendency to bring in outsiders ..."

MACY'S starts on p. 32

salespeople when and where needed.

• **Pique**—Such irritations as these were evidently aggravated by some of Weil's personal traits. One former associate of his commented recently that "It's hard to be neutral about Weil." Even those who try to be neutral think that Weil was too inflexible in his decisions. A lot of the criticism centers on his tendency to bring in outsiders who weren't experts in retailing, and to promote them over the heads of veterans.

A number of people feel that the New Yorker profile—which Weil consented to—was the final touch to an otherwise tense situation. Said one trade observer: "It made Macy's look like a place run by a jazz pianist and two frustrated philosophers."

• **At the Helm**—For the time being at least, Jack I. Straus, president of the parent corporation, has "assumed direction" of the New York operation along with his other duties. Straus, who is a cousin of Weil's, originally held both positions before the Macy's New York operation was severed from the chain in 1949 and handed to Weil. Meanwhile, the latter will go back to devoting full time to his job of vice-president of the corporation.

Only one other job change has been announced thus far. Charles Bartlett is being brought east from Macy's San Francisco, to replace Victor M. Ratner, promotion chief at Macy's New York. Ratner, former head of promotion for the Columbia Broadcasting System, was brought in by Weil (BW-Mar.3 '51,p96). He will set up his own Madison Avenue public relations firm.

• **Two Schools**—None of this, of course, tackles the big problem that stares the big store in the face. What will be done about its price policy?

It's hard to say since, as far as anyone knows, the time-honored Macy policy of underselling everybody, if possible, is still holy writ. No one at Macy's ever questions it publicly. (As far as that goes, Weil and Straus were as one on the price war policy.) Nevertheless, observers say that there is at least one school among the buyers at Macy's that would like to forget the whole price policy. They think it simply costs the store too much to maintain.

If this school of thought should gain headway, it would prove a significant movement. For the buyers at Macy's are the last remnant of the old school that learned its retailing under the earlier great Strauses, Jesse and Percy.

You don't like to be a packhorse, do you?


Well, the deafened don't either. And, as a result, hearing aid makers have moved heaven and earth to make their instruments smaller and more compact. Yet more powerful!

Smaller hearing aids meant smaller vacuum tubes, of course. And smaller tubes meant...?

They meant problems! For inside these sub-miniature tubes are three tiny ladder-like grids where the softest whisper steps up to be amplified to scale the wall of silence. And these Lilliputian "ladders" are formed of microscopically fine wire. Wire nowhere near as thick as a human hair.

Now wire like this just doesn't come in any metal.

To get it, you've got to find a metal that (1) has the strength and ductility needed to be worked into such fine parts; that (2) has the electronic characteristics needed for tube elements.



When they
were scaling
the wall
of silence...

Finding such a metal takes doing, you may be sure. But searching and testing intensively, the hearing aid makers *did* it: they found the solution to their problem in Inco's Pure Nickel.

A cue for you... Like good men, good metals are hard to come by...today.

And, if your staff is now searching for one that has just the right combination of properties to give them a future "leg-up" on some tough design problem, we'd like to help...through our "Forward Planners!"

To start them working on *your* problem, just set down the facts they need to study. Then mail your outline to "Forward Planners," International Nickel Company, Inc., 67 Wall St., New York 5, N. Y.

THE INTERNATIONAL NICKEL COMPANY, INC.

Monel® • "R"® Monel • "K"® Monel • "KR"® Monel
"S"® Monel • Nickel • Low Carbon Nickel • Duranickel®
Inconel® • Inconel "X"® • Incoloy® • Nimonic



Nickel Alloys



THE EDITORS hold frequent liaison meetings in plush Chicago offices. In center is James H.

Johnson, who founded *Ebony* and is now editor and publisher of that and two other magazines—*Tan* and *Jet*.



THE MAGAZINES

are sold largely from newsstands in metropolitan Negro communities

and at transfer points where Negroes pass on their way to work. Harlem newsstand above sells more *Ebony*'s than *Life*'s.

Ebony: Making a New Market Pay Off

It's no secret that the Negro market, with its annual buying power of \$15-billion, is big. What isn't so well known is that this market has been shaping itself along more than just racial lines. Today it's an urban market.

Negroes had been moving to the cities before 1940, but it was World War II that gave the trend its big push. High-paying defense jobs lured thousands of Negroes into industrial areas. Once there, they stayed. And their country cousins are still pouring

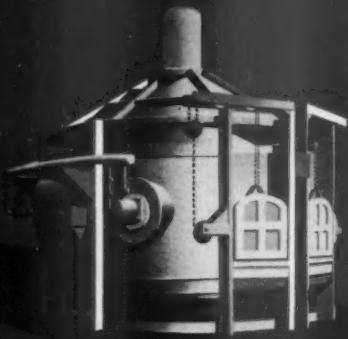
in to join them. Between 1940 and 1950, the nonwhite (largely Negro) population nearly doubled in 30 metropolitan areas in the Northeast, the Central States, and the West. For the West alone, the percentage increase was 127%. Today about 61% of America's Negroes live in urban centers.

With this basic fact as a runway, the Negro magazine *Ebony* was launched.

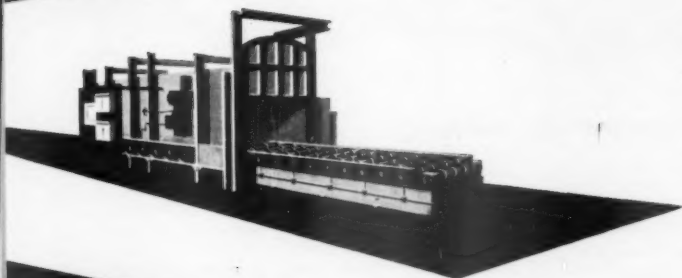
• **The Formula**—*Ebony* is a 110- to 130-page monthly, much on the pattern of

Life magazine. It contains picture stories, personality sketches, fashion articles—all of general or specific interest to the city-dwelling Negro. It's published by a 34-year-old Chicagoan, James H. Johnson.

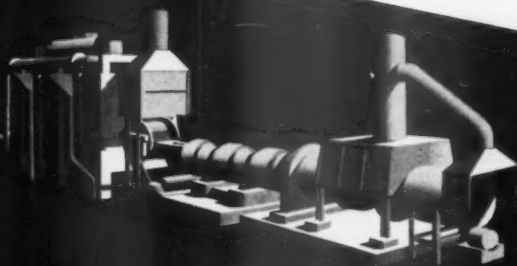
Johnson Publishing Co. also puts out *Tan*, a women's confession-type magazine, and *Jet*, a pocket-size news and picture weekly like *Quick*. These two, with *Ebony*, make up a trio of magazines with a combined circulation of more than 1-million. Probably the most



**Production heating
furnaces for guns, shells,
aircraft or engine parts**



Prominent among the many services offered by Salem-Brosius to the metal-working industry, both ferrous and non-ferrous, is the design and construction of heating and heat-treating furnaces specially adapted to defense production. Whether you produce aircraft, ordnance, armor, engine parts, or a multitude of similar and associated items, the experienced staff at the Salem Engineering Division is prepared to help you . . . to build furnaces for you that cut cost and add production. Remember, if you have a problem which involves the use of furnaces, blast furnace equipment, or charging and manipulating machines, it will pay you to call on highly diversified Salem-Brosius today.



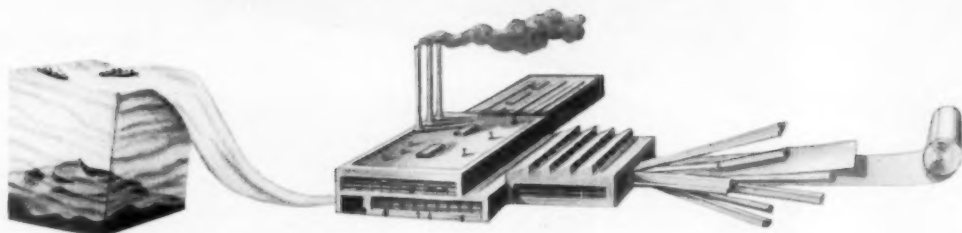
SALEM-BROSIUS, INC.

SALEM ENGINEERING DIVISION, SALEM, OHIO

BROSIUS DIVISION, PITTSBURGH 15, PA.

MAGNESIUM

and the problem of **METAL SUPPLY**



for your product

The problem of metal supply is in reality a dual problem. First is the question of raw material supply and second, the supply of fabricated forms. To each of these, magnesium offers an interesting answer.

As the increased demands of industry call for more and more metal from Mother Earth, ore reserves become ever more important. Magnesium metal, now extracted from the sea, is the one metal with literally an inexhaustible supply. Consider this fact:

If magnesium were extracted from the sea at the rate of 100 million tons per year . . . the current rate of iron and steel production . . . for 1,000,000 years, we would have reduced the supply in those seas only from 0.13% to 0.12%!

And those seas are at our very shores, eliminating

the costs and hazards of transportation. Here is a potential of interest to every metal user.

At the other end of the supply problem is the question of fabricated forms. Currently, Dow is constructing an 84" hot and cold sheet and strip mill, the first in this country for magnesium. When completed, this mill at Madison, Illinois, will increase Dow's capacity for sheet, plate and strip by many times . . . with provision for even further expansion. This new Dow mill will also have facilities for extrusion, increasing present capacity appreciably.

Metal supply? Keep your eye on magnesium . . . the world's lightest structural metal . . . offering you the potential of infinite supply.



For Your Product . . . Tomorrow!

Magnesium's perfect combination of light weight and high strength makes it invaluable to our defense effort. "Drafted" today, it still deserves every consideration in planning for your tomorrow's product. Wherever a product is made to be moved or lifted, magnesium is a must. 75% lighter than iron, 30% lighter than aluminum, magnesium is the world's lightest structural metal.

Magnesium Dept.

THE DOW CHEMICAL COMPANY • MIDLAND, MICHIGAN

New York • Boston • Philadelphia • Atlanta • Cleveland • Detroit • Chicago • St. Louis
Houston • San Francisco • Los Angeles • Seattle • Dow Chemical of Canada, Limited, Toronto, Canada



"... Gross ad revenue for 1951 was over \$680,000 ..."

EBONY starts on p. 38

important reason for their success is their editorial slant.

Johnson outlines the formula this way: "Before I started Ebony, you'd never know from reading other publications that Negroes got married, had beauty contests, gave parties, ran successful businesses, or carried on any normal living activities. We try to present the good things that Negroes are doing, with emphasis on what can be done, not on the handicaps, in a lively colorful way that appeals to our readers."

A recent issue of Ebony, for instance, carried an article about Japanese war brides of Negro servicemen, a personality piece on a Negro ice skater, a story about two college men who earned their tuition by running a gas station, an article on a prominent Negro radio executive, and a picture story about a gala party in honor of singer Billy Eckstine.

This formula, plus the city-dweller pitch, has apparently struck just the right note. From the time Ebony made its bow in 1945, circulation has jumped almost 100,000 a year—to 500,000. (Most of this circulation comes from big northern cities.) And readership surveys show that in Negro communities Ebony outsells other publications of the same type, edited primarily for white readers, by 14 or 15 to 1.

• **Early Problems**—When Johnson started Ebony, he knew he was going to face some special problems. Most important of these were (1) how to build circulation, and (2) how to get advertisers.

The circulation problem boiled down to a paradox: Ebony was a magazine addressed to a special group—in that respect much like a stamp collectors' or musicians' publication. A magazine like that, not being of general interest, is usually sold through subscriptions rather than in bulk through newsstands. To the Negro who buys Ebony, though, it's not a specialized but a general magazine—and general magazines are traditionally easier to sell off newsstands than through subscription offers. Earlier Negro publications that had tried to depend on subscriptions had found this out.

To lick the dilemma, Johnson priced Ebony at 30¢—a level low enough to move it off the newsstands. Then, instead of depending on national distributors—as most big magazines do—he put Ebony into the hands of carefully chosen independent wholesalers in each city. These wholesalers, in turn, picked their newsstands carefully. Ebony

concentrates on newsstands (1) in Negro communities, and (2) at subway entrances and other points where Negroes pass on their way to and from work. Johnson's own circulation staff works closely with the distributors to see that this program is kept in top gear. Present circulation figures vouch for its effectiveness.

• **Advertising**—The second problem—getting advertisers—was not so easy to handle. Many advertisers and their agencies felt that the standard general magazines and newspapers carried their sales messages capably enough to the more prosperous Negroes, and that no special selling effort was needed. Johnson's reply: The Negro trend toward cities has created a new, concentrated, easily reached market with fairly uniform tastes and a receptive ear for specially pitched advertising. Negroes, he pointed out, are a minority group who want recognition as people and customers. For that reason, they'll be loyal to products advertised in their own magazines.

In the early days of Ebony, when Johnson was trying to get this story across, he found that advertising agencies were leery of risking their clients' money in so unproven a field. So he went direct to the president of the company whose advertising he was after. "It was sort of like the Army," he recalls. "There, a little general can always talk to a bigger general. As president of Johnson Publishing Co., I could get to see the president of a big company."

• **Results**—Finally, Johnson's work began to pay off. His first big national advertiser was Chesterfield cigarettes, soon followed by Beechnut chewing gum and Schenley's Calvert whiskey. Today Ebony's pages are used by more than 200 regular advertisers. Advertising in 1951 ran to 421,000 lines—over four times the 1947 figure. This puts Ebony in 13th place among the national monthlies. The magazine now charges \$1,250 a page for advertising, with a guaranteed circulation of 400,000—100,000 below what it's actually running. Gross ad revenue for 1951, when rates were still \$1,000 a page, was more than \$680,000.

Johnson's other two magazines, Tan and Jet, aren't up to Ebony, but they're both doing a sizable business: Tan has a 300,000 guaranteed circulation and charges \$900 a page for advertising; Jet, with 200,000, charges \$600.

• **Extras**—To help advertisers with their merchandising, Johnson offers various special services. He has made up lists of all retail outlets in metropolitan Negro communities. His staff men help advertisers get proper display in these stores, advise salesmen on the best approaches to Negro customers. A film and pamphlet, "Selling the Negro Mar-



MOSINEE Forest Fibres help improve transportation

• Proper "curing" of concrete, for maximum durability, was formerly a major road-building problem. MOSINEE fibres helped solve it. Waterproof, reinforced "road blankets", made of tough MOSINEE, laid over fresh concrete, assure proper curing. Thus, MOSINEE helps improve transportation!

Many industries bring difficult problems to MOSINEE. Creation of chemically treated fibres for specific end-uses, is a major part of MOSINEE service to industry. Your product, processing or packaging problems, seen through the eyes of MOSINEE Research Laboratories, might also be solved here, where scientific controls frequently provide profitable answers. Dept. BW.

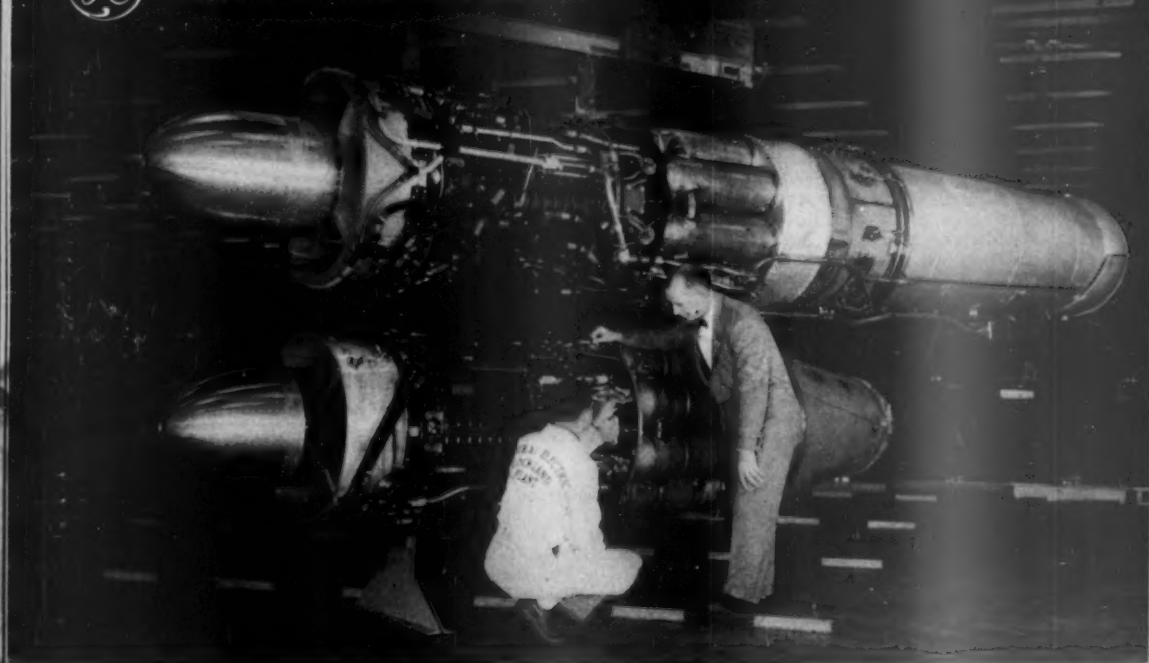
MOSINEE PAPER MILLS CO.
MOSINEE, WISCONSIN



MOSINEE
makes fibres work
for industry



ENGINEERING REPORTS:



LATE MODEL JET ENGINES like these are result of continuing improvements made since G.E. built first U.S. jet in 1942. Today,

record shows G-E designed engines have powered more planes, flown more miles, broken more records than all other U.S. jets combined.

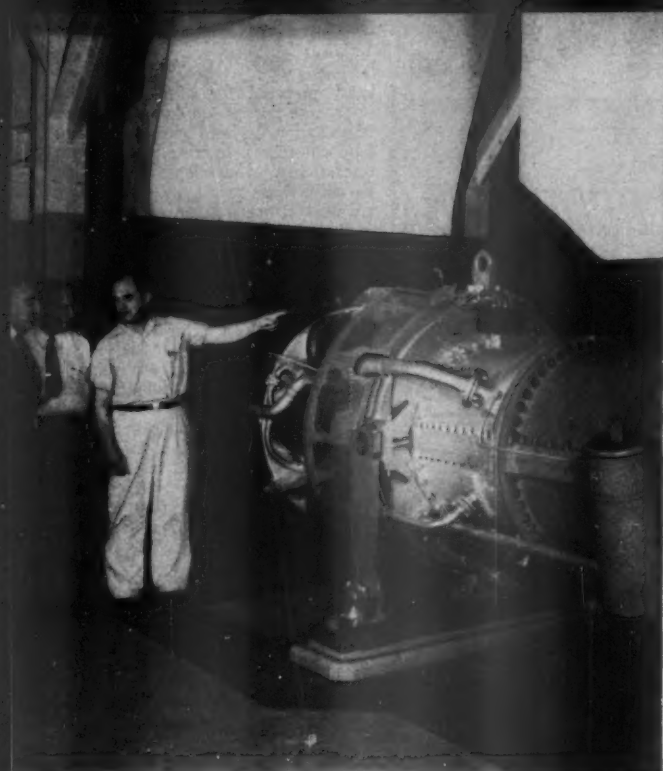
AMERICA GETS COMPLETELY NEW



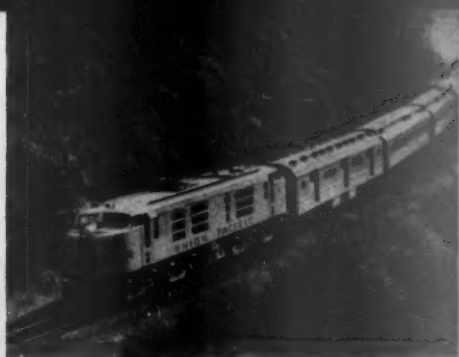
G-E ENGINEERS Alan Howard (left) and C. J. Walker inspect another early G-E development—America's first turboprop engine. They are among the many G-E pioneers in gas turbine engineering.



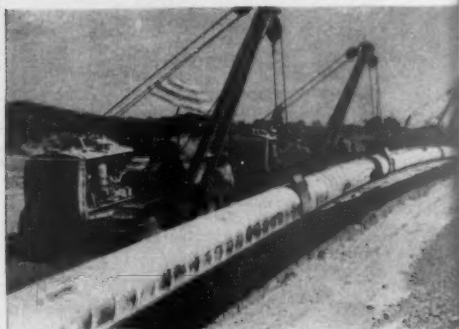
RESEARCH AND CREATIVE ENGINEERING, plus 45 years of steam turbine experience, have built G.E.'s gas turbine leadership. Here, lab technicians test compressor design for new gas turbine.



FIRST electric-power producing gas turbine in the U.S., this G-E unit at Oklahoma Gas and Electric Company has completed nearly three years of successful operation.



LOCOMOTIVE POWER is supplied by G-E gas turbine which generates more power than any other type engine. Union Pacific has ordered ten units.



GAS PIPELINE compressors will this year be powered by G-E gas turbines burning gas from line.

TYPE OF POWER

In 10 short years, G-E engineering develops gas turbines for aircraft, power stations, locomotives, pipelines

In March 1942, the first U.S. jet aircraft engine was built by General Electric. Today, improved G-E jets enable pilots to battle at the speed of sound. And using the experience gained in jet engine development and production, G-E engineers have produced gas turbines for industry.

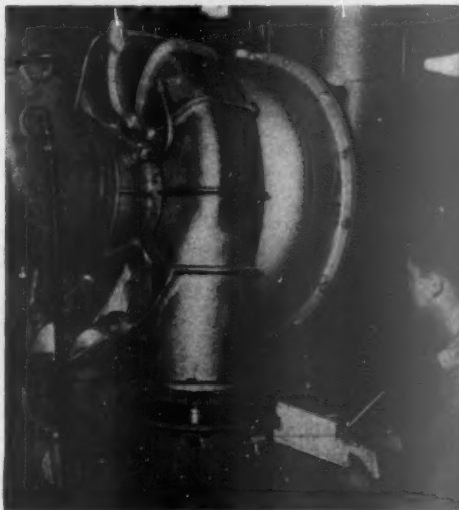
In 1949, for example, G-E engineers installed the first gas turbine for electric utility use. That same year, G-E built the first U.S. gas-turbine-electric locomotive. Petroleum industries will benefit from this G-E engineering, too: a series of gas-turbine pumping stations is now being built for a natural gas company. Akin to these developments is the G-E turbosupercharger which boosts the output of aircraft and diesel engines.

You can take advantage of this engineering leadership by specifying "G.E." when you purchase electric apparatus. And on jobs where high-quality system engineering is required, G-E application engineers will draw on this experience in working closely with you and your consultants. Call your G-E Apparatus Sales Division office early in the planning stage. General Electric Company, Schenectady 5, N. Y.

Put this G-E Engineering to work for you

GENERAL  ELECTRIC

673-12



G-E TURBOSUPERCHARGER reduces weight-per-horsepower of diesel engine from 35 to 18 lbs. On locomotives, it also improves operation at high altitude.



Truck, train, ship and plane will place your South Carolina plant at the doorstep of the world. The three major trunk railroads cover the State, fed by East-West supplementary lines at every point. Nine South Carolina cities are on regularly scheduled airline routes with connections to every point in the world. The ports of Charleston, Georgetown and Beaufort provide ready access to the world markets.

South Carolina's highway system is unsurpassed in the U. S. Workers easily commute from farm homes to jobs; trucking operations are simplified and new; excellent industrial sites are easily accessible.

Locate your new plant in South Carolina where fast, efficient transportation is at your service.

LOCATE YOUR PLANT WITH THESE EIGHT ADVANTAGES:

- Happier, more productive workers
- Cooperative State and Local Government
- Nearness to markets
- Gentle climate
- Wealth of natural resources
- Abundance of water and power
- * Splendid transportation (land, sea, air)
- Low construction and site costs

Your inquiry will be handled in strictest confidence. Write, wire or telephone (LD 94) now.

Charles N. Plourden, Director

Research, Planning and Development Board Dept. BW 3—Columbia, South Carolina

South Carolina



ket," prepared for advertisers' sales staffs, give tips on the do's and don'ts of dealing with Negro businessmen. For food advertisers, Johnson has set up a test kitchen to develop recipes using the advertiser's product. These recipes are worked out with an eye to Negro food preferences, which sometimes differ widely from white tastes.

• The Negro Press—Ebony, Tan, and Jet actually represent only a small part of the grand total of Negro publications in the U.S. Our World, and Color, are two other national Negro magazines. There are also about 200 Negro newspapers in the country, with an estimated circulation of 2-million and an annual national advertising revenue of over \$4-million (not including local advertising). They, too, are gaining circulation as more Negroes move into the cities. The Pittsburgh Courier, for instance, had an audited circulation of 120,000 in 1940; today it can boast 260,000.

MARKETING BRIEFS

B.V.D. Co., traditionally a maker of underwear, is turning its attention to outer garments. The company has already picked several of 60 interested firms to manufacture a complete line of men's, boys', and eventually women's wear, to sell under the B.V.D. label.

Gimbel Bros. ended its fiscal year 2.6% ahead of fiscal 1951 in sales; total was \$389.5-million. Unlike a lot of stores, its fourth-quarter returns—which included this year's bad January—were some \$2-million higher than the preceding fourth quarter, which included the boom month of January, 1951.

Children's books are selling Johnson & Johnson (drug) products. Last year Simon & Schuster's book for small fry, Dr. Dan, the Bandage Man, contained a dividend of Band-Aids—six in each of the 2-million copies sold. Now S&S's Little Golden Make-It Book, called Tex and His Toys, comes with a roll of cellophane tape.

Two clothing chain expansions: Robert Hall Clothes, big family apparel chain, opened seven stores in Detroit on one day this week, climaxing an 18-store expansion for the month of March. This brings the total of its outlets to 130. Crawford Clothes, which just opened its 69th unit in Silver Spring, Md., plans to have 100 stores by the end of 1953.

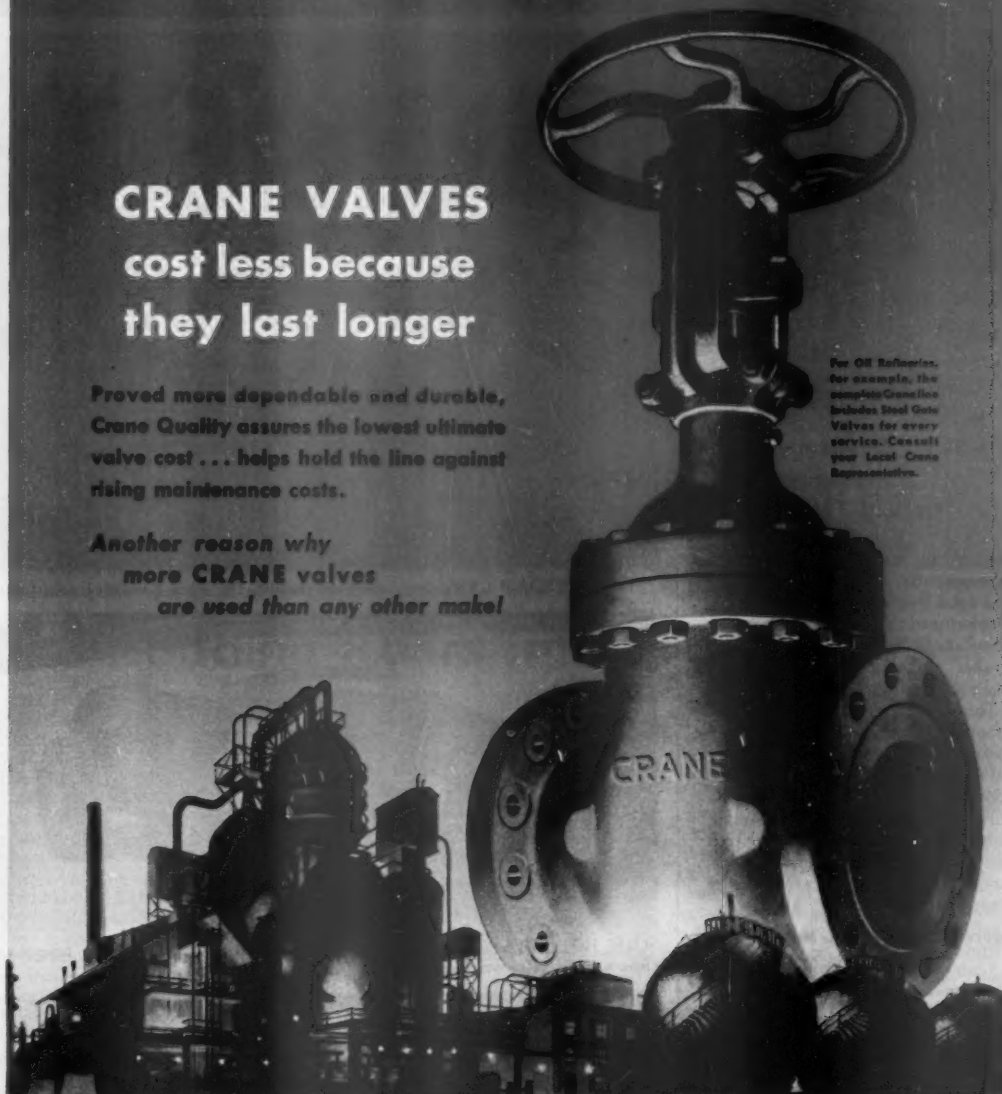
Room service is at an all-time high, says New York's Hotel Edison. Out-of-town stay in their rooms to watch TV, have food and beverages sent in.

CRANE VALVES cost less because they last longer

*Proved more dependable and durable,
Crane Quality assures the lowest ultimate
valve cost . . . helps hold the line against
rising maintenance costs.*

*Another reason why
more CRANE valves
are used than any other make!*

For Oil Refineries,
for example, the
complete Crane line
includes Steel Gate
Valves for every
service. Consult
your Local Crane
Representative.



CRANE

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO 5, ILL.
BRANCHES AND WHOLESALERS SERVING ALL INDUSTRIAL AREAS

VALVES • FITTINGS • PIPE • PLUMBING • HEATING

CENTRAL HUDSON GAS & ELECTRIC CORPORATION



COMBATS CORROSION

IN A BIG WAY

Aiming at minimum repair and maintenance costs, this corporation used Byers Wrought Iron plate to safeguard their 84-inch diameter circulating water line from the double corrosion threat of water and soil.

This selection is in line with the accepted practice of hundreds of cost-conscious companies throughout the country. They know that "cost-per-year of service" is the only true measure of economy. Service records have proved that genuine wrought iron pipe lasts longer in areas where corrosion is a serious threat.

Corrosion Costs You More Than Wrought Iron

Interesting case studies of genuine wrought iron installations from the past are presented pictorially in this new non-technical booklet, "Proof by Performance". Send for your copy. Write: A. M. Byers Company, Clark Building, Pittsburgh 22, Pa.



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HOBBIES



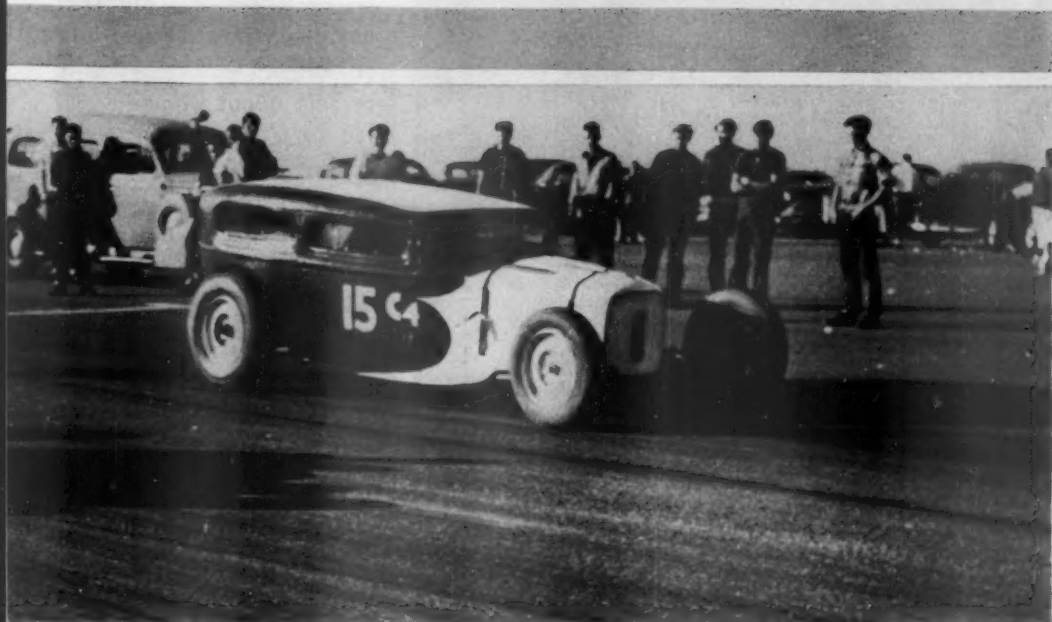
TWO HOPPED-UP CARS—one a modified roadster, the other a modified sedan—take



SOME HOT RODS are "hot" from a body standpoint, rather than having hopped-up engines. This body was built by hand, power-hammered from sheet steel.



PUBLICATIONS for hot rodders have come into being to this extent just since the war. Their soaring circulation reflects hobby's huge growth.



off on a "drag race" (through all the gears) on the western salt flats where hot-rod race courses are set up.

Hot Rodding Roars Into Big Business

Just since World War II, two entirely different hobbies have enjoyed sudden and tremendous booms. One of them, in the field of automobiles, is "hot rodding"; the other, in the field of electronics, is in high-fidelity phonographs and radio (page 52).

• **Common Ground**—The two hobbies have a lot in common. A hot rodder is a person who isn't satisfied with an automobile as Detroit turns it out, so he takes it upon himself to improve it either in looks, power, or both. A high-fidelity fan is a sort of high-brow indoor hot rodder. He doesn't like the commercial radio-phonograph combinations—they don't reproduce music from records or broadcasts faithfully enough for his ear. So he either buys individual components of a high-quality system and assembles them himself, or has someone do it for him.

As you might expect, this kind of desire leads to varying degrees of perfectionism in both hobbies. You'll find in each: (1) moderate enthusiasts who just want something a little better than the standard product; (2) "nuts" who won't settle for anything less than what they think is the best in the world; and (3) a big group somewhere in between.

Both hobbies have, at least in a sense, created whole new industries. Even more than that, they are now making their improvements on the standard

product felt in the industries from which they stem:

• **Bad Name**—Perhaps the main difference between the two hobbies lies in the fact that high fidelity glows much more brightly in public respect than hot rodding. The ordinary driver thinks of the hot rodder as a teen-aged screwball, with or without a driver's license, who barrels along highways at 90 mph. in a souped-up jalopy with no fenders. Newspapers keep this view alive by almost invariably saying that any youth in an auto accident was driving a hot rod.

Genuine hot rodders rage at this kind of accusation. They have nothing but contempt for teen agers who careen down highways in jalopies or "clunkers." These cars, say the hot rodders, are not hot rods at all, but "shot rods" or "slop-ups." One authority defines the true hot rodder as a responsible, mechanical-minded, "speed-oriented" person whose hobby it is to soup up stock engines, strip down the bodies, and time-test the vehicles on safe, designated runways.

• **Big Show**—Next week the hot rodders hope to show New Yorkers that this has become a respectable hobby—they will stage a hot-rod show at Grand Central Palace. During the year others will be held in Hartford, Portland, Ore., Los Angeles, and elsewhere.

The main reason for this kind of display is the tremendous growth of the sport since the war; best estimates are that today there are at least 500,000 hot-rod fans in the U.S., Canada, and Hawaii. Most addicts are not in their teens, but in their twenties, although they range in age from 16 to 60.

All this has lent new respectability to an old sport. You see signs of that everywhere. For example: Hot rodders get along with cops a lot better nowadays than they used to—mainly because they observe traffic laws carefully and do their fancy driving in designated places. Furthermore, some engine developments tested out by hot rodders are being at least unofficially recognized by Detroit.

• **Centered in California**—The real center of hot rodding, ever since the thirties, has been Southern California—as might be expected. (One theory holds that it actually originated in the Kentucky mountains, where moonshiners hopped up their cars to escape from revenuers.) The movement first became popular in the twenties, when kids began hopping up Model T Ford engines.

But the thirties brought the first big push to the hobby, thanks to the V-8 engine. The V-8 was sturdy at the lower end, in the crankshaft and bearings. So you could put the hot stuff on



When the finish is only the beginning

THOUGH checking the finish of a bearing raceway is but the beginning of many such inspections, it's a highly critical one. Smooth finish means a quiet-running bearing—one that lasts longer, carries heavier loads. To test smoothness, Federal uses an unusually-accurate measuring device: a "feeler" sweeps back and forth across the raceway surface, picks up the slightest deviation, then translates it into an electrical impulse. By observing dial indications, the inspector knows whether the raceway meets Federal standards. From beginning to finish, inspections like these are your assurance that Federal bearings meet your toughest performance standards.

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Federal BALL BEARINGS
One of America's Leading Ball Bearing Manufacturers

"... wherever California boys went into service, talk of hot rods was second only to talk about women ..."

HOBBIES starts on p. 46

top without danger—valving manifolds, carburetors, and so on. Then, after World War II, the movement really mushroomed—probably because wherever California boys went into service talk of hot rods was second only to talk about women.

• **Parts Makers**—An indication of the growth of the hobby shows up in what's happened to companies making the parts. Since the war, about a dozen manufacturers of special speed parts have sprung up—most of them in and around Los Angeles—devoted specifically to hot rodding. During 1946, they did a total business of about \$1-million. This year it's expected to run between \$45-million and \$50-million.

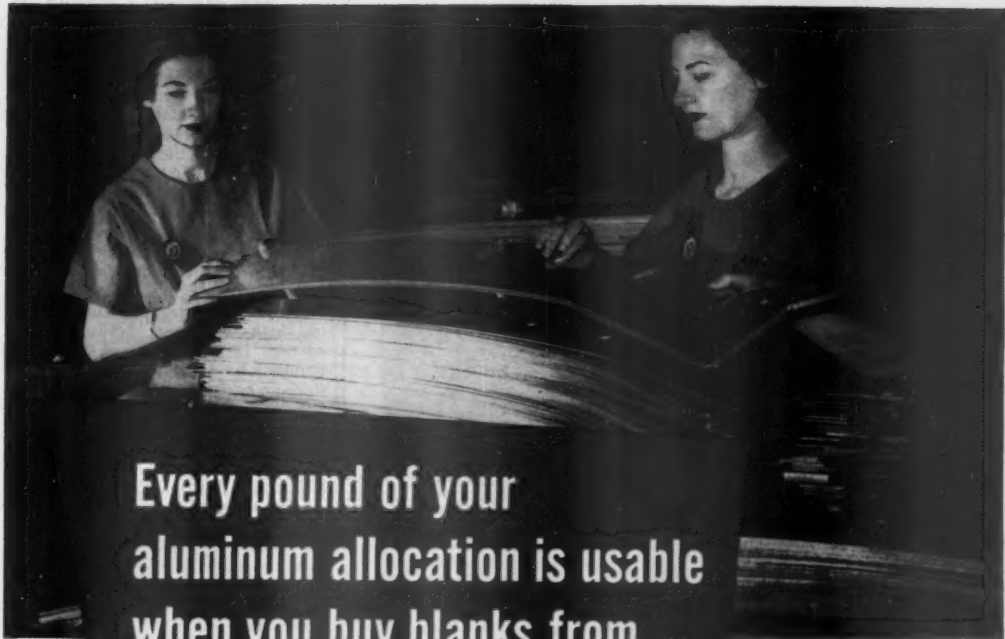
Hot rodding has brought about not only a new auto-parts industry; it has also created a whole new field of publications. Six years ago, there were no magazines devoted to the hot-rod hobby. Today there are about a dozen. Most startling of all is their circulation gain. Hot Rod Magazine, for example, a monthly started in 1947, had a sales gain of 181% between 1949 and 1950. Now it's the biggest in the field, with a print order of 500,000.

• **Two Breeds**—Generally, there are two kinds of hot rodders. The first is one who concentrates on the body—stripping it down, or "chopping" it. Sometimes they remove fenders, put on chrome front-end assembly, "channel," or lower, the center of gravity of the body over the frame. They keep the finish in excellent shape, sometimes put on as many as 25 coats of lacquer, rubbing each down by hand.

The second kind of hot rodder is interested mainly in the powerplant. His aim is to boost the horsepower, and thus the "getaway" and speed, of a stock automobile. The cost of doing such a job can run anywhere from \$30 to \$3,000, depending on what he does.

• **"Speed Shops"**—A lot of hot rodders get parts for their cars via mail order. Others buy parts from one of the some 1,000 "speed shops" that have sprung up around the country. These are small independent companies that are usually adjuncts to or outgrowths of small gas stations or garages. (Some of the manufacturers started out with "speed oriented" garages of this type.) They are in effect the retail outlets for the parts hot rodders need.

These garages and speed shops play a big role in the hot-rod boom. That's where the young people gather, listen



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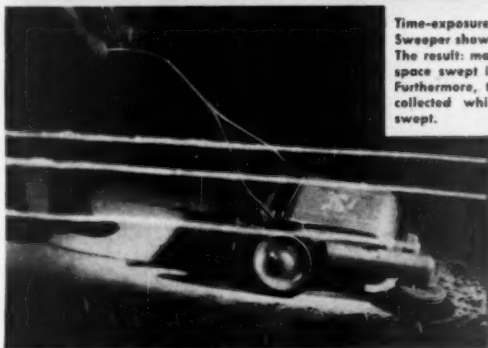
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"... the present Cadillac is
'a comfortable hot rod ...'"

HOBBIES starts on p. 46

to seasoned veterans talk about cars, pick up the hot-rod bug themselves. They find that they don't need too much money to hop up their own cars at least to some extent.

Most common features of a hopped-up engine include dual carburetor manifold (increasing horsepower by 15% to 20%) and dual exhaust systems (increasing horsepower by 5% to 10%, sometimes much more). Special high-compression heads will add another 15% or 20%; so will a re-boring job. If they want to spend the money, hot rodders can boost the horsepower of a Ford or Mercury engine (most commonly used cars in hot rodding) from just under 100 hp. to 200 hp.

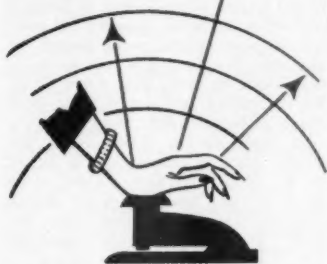
• **Group Activity**—Cars hopped up to anywhere near this point are used for racing. And most hot-rod fans these days belong to at least one club. They hold competitive "drag" races (an acceleration test through the gears) at special spots like abandoned air strips. Sometimes, out West, they make the big trip for the time trials at one of California's or Utah's dry lakes. They abide by strict rules of conduct and courtesy, on the highways or at races. Races, in turn, have strict rules: Every car must be technically O.K. and equipped with safety belt, roll bars, crash helmet, fire extinguisher.

Clubs are banded together in "timing associations." These associations have an air of super respectability, supervise race and time trials. Authorities give them most of the credit for organizing hot rods into respectable disciplined clubs, and for furthering the hot-rod movement.

• **Detroit Interest**—The hot-rod movement has developed enough so that Detroit has begun to pay a lot more attention to it. More and more engineers from the big auto companies are showing up at hot-rod races. Oliver Billingsley, editor of Hop Up Magazine, says that the most obvious influence on Detroit so far is the dual exhaust systems that are now standard equipment on Cadillacs and optional on Hudson and Nash.

Robert D. Smith of Advance Muffler Co. points out that truck companies and police cars install dual exhaust systems to step up horsepower. Further than that, he says, the engines in the new Oldsmobiles, Cadillacs, Chryslers "are practically dry lakes products" (hot rods built for racing on the dry lakes), refined through Detroit's blueprint dept. In other words, he says, the present Cadillac is "a comfortable hot rod."

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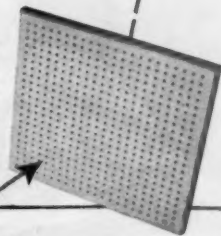
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... costly overtime...

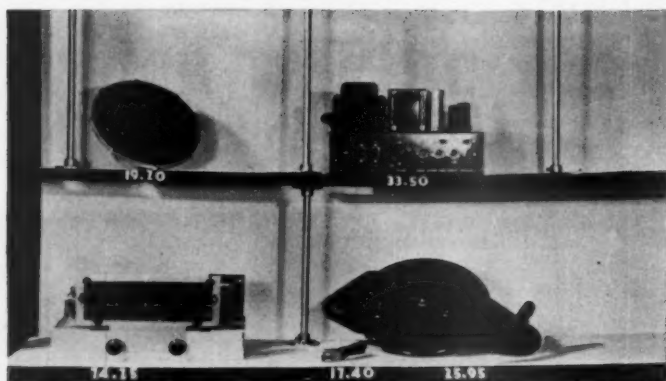
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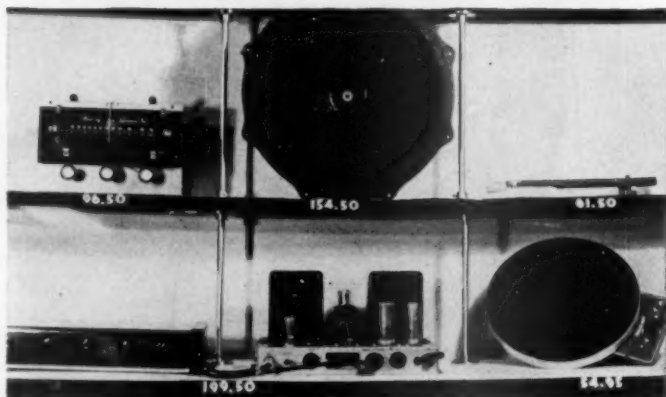


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Electronic Workshop offers basic hi-fi rig for \$170 (\$95 without FM tuner), other combinations ranging up to . . .



MAXIMUM UNIT

Selling for \$567.15, this has top-quality hi-fi equipment, including transcription turntable in place of changer.



IN THE BLACK

President Clifton Howard (left) and vice-president Jay Carver find plenty to grin about over their books: Business is wonderful.

Cashing In on

In 1948 a man who bought a house in the suburbs of New York found kicking around in the cellar a piece of electronic equipment called an amplifier. He knew a little about electronics, had heard high-fidelity phonographs, and was impressed. He saw that the amplifier had been well built by an electronics engineer. He fixed it up, got it working, and enjoyed his new hi-fi system for about six months.

• **Dissatisfaction**—Then, little by little, it began to annoy him. There was a "wow" in the turntable. He could hear record scratch—even though he knew it was still a lot better than his old commercial phonograph. So he junked the amplifier, bought a new one made by Bell Sound Systems, Inc., a new 12-in. Jensen speaker, and a new three-speed record changer. Cost: about \$125.

It made all the difference in the world. Then, a month ago, he began to get dissatisfied again. Once more he went out and bought a Brook amplifier (more expensive than the Bell), a transcription-type turntable (no wows at all, absolute speed), a special low-pressure pickup arm, and two 8-in. Altec-Lansing speakers. Cost: about \$300.

• **The Web**—That, essentially, is what happens once people get caught in the hi-fi web. And a survey of the manufacturers and distributors of hi-fi equipment by *BUSINESS WEEK* last week showed that an increasing number of people are becoming hi-fi fans. There seem to be three reasons for this. First, more and more people are learning—mainly through hearing their friends' hi-fi sets—of the kind of quality you now can get in music reproduction. Second, they insist loudly that they can get twice the fidelity of reproduction from a custom-built set that they can get from the most expensive commercial system—and for half the price. Finally, they find their own standards rising so that they want even better equipment.

High-fidelity sound systems are so good now that they have reached a point where science and technology end and art begins. And as in all art, the judgments as to what's good and what's bad vary with every individual. As a science, hi-fi really started amounting to something after the war, when both laboratory engineers and electronic companies began constantly improving amplifiers, speakers, and other components—and above all records.

• **What Is It?**—Just what is high fidelity? The term means just what it says: It is sound reproduction (particularly music) that is highly faithful to the original, close to what it would sound

Finicky Ears

like when heard "live." From a technical point of view, it can best be illustrated in this way:

The human ear can hear a range of sound frequencies from a minimum of about 20 cycles (waves) per second (the lowest note on an organ) to an absolute maximum of 20,000 cps. Few people can hear above 15,000 cps.

AM radio network, which moves over telephone wires, cannot transmit frequencies much above 5,000 cps. Likewise, conventional 78-rpm. phonograph records won't take more than 6,000 or 7,500 cps., tops. Thus for years there was no point in building amplifiers or speakers for commercial use that could take higher frequencies—and nobody did build them.

• **The Real Start—Hi-fi** really got its start when FM (frequency modulation) radio was finally commercially recognized in the early 1940s. Invented in 1933 by Edwin H. Armstrong, this was a remarkable electronic achievement. Not only was FM staticless; its broad channels made it easy for the first time to transmit radio frequencies up to 15,000 cps. Radio engineers began developing amplifiers that would push these signals through the speaker.

Other engineers had been experimenting with new commercial record-playing equipment and new broad-range speakers. They came out with featherweight pickup arms for phonographs, new "pickups" that cut record scratch way down.

• **Improved Records**—But even more was in the works. Years of work for radio use had shown that low-speed, "microgroove" records brought far greater fidelity. Columbia Records, Inc., and RCA-Victor began experimenting to make them commercially feasible. Both did—Columbia settling for a speed of 33 $\frac{1}{3}$ rpm. (trade-named Long-Playing, or LPs) and Victor for 45 rpm. Made of Vinyl plastic, both types will record up to at least 12,000 cps.—twice as great a range as ordinary shellac 78 rpms.—and have almost no hiss or record scratch.

Commercial player manufacturers developed three-speed players, got them on retailers' shelves.

• **Golden Change**—At this point all the vast improvement in every phase of hi-fi development came together to form a strong chain for real high-fidelity. Now, instead of getting roughly 50% perfect reproduction either by radio or records, you could get 90% easily—and at a low price. (The "bugs" spend hours of work and hundreds of dollars trying to boost it to 93% or 94%.)

This tremendous technical change had more effect than anything else



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"TO THE food product manufacturer, a location in Metropolitan Oakland Area offers many inducements that have a direct effect on profits," says Mr. Hanford Main, President of Sunshine Biscuits, Inc., in telling why his firm chose this area for a model plant, built in 1942.

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on high-fidelity growth in the face of serious competition from television. Another reason was that there was a big group who became hi-fi fans because they would have nothing to do with TV.

• **Good Business**—This boom has brought a lot of money to a whole raft of companies, many of them newcomers and unknown by the public. It has even brought a fancy new publication, a quarterly called *High-Fidelity*, published in Great Barrington, Mass. In a year (four issues), its circulation has leaped from zero to 20,000.

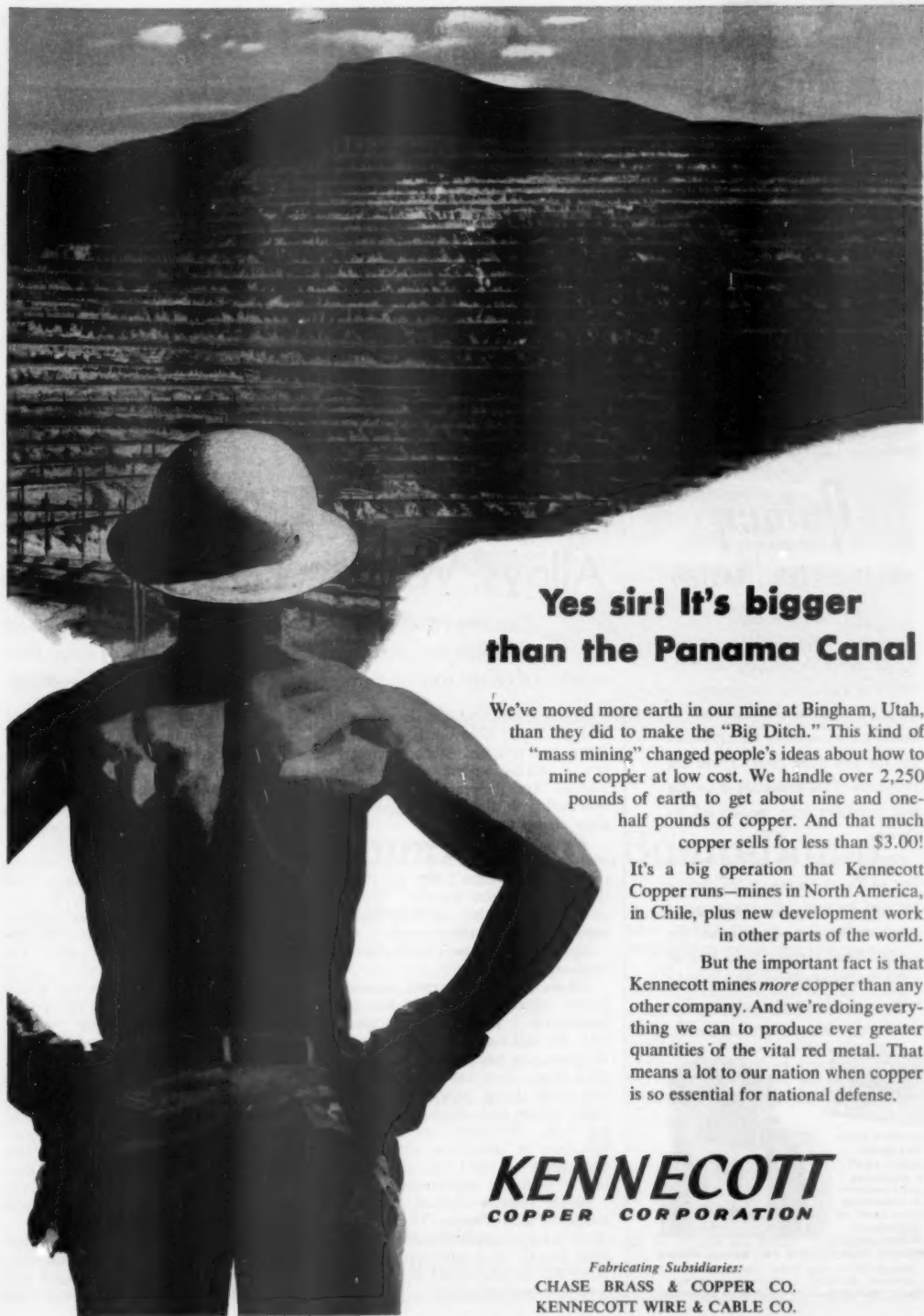
Most impressive are the reports from manufacturers and distributors of equipment. Webster-Chicago, for example, makes one of the most popular three-speed changers. During the past two years its sales have soared at least 45% for custom installations. Allied Radio, big distributor of all components, says sales of all hi-fi equipment have shot up tenfold since the war. And there's no sign of a letdown.

• **Don't Get Stung**—How do people buy hi-fi sets? Unless they know something about electronics, few dare pick out the components by themselves and hook them up. That's because they have to be matched and balanced, to give them their money's worth in genuine hi-fi reproduction.

Commonest approach: Have a friend who really knows the business help buy and assemble the stuff. Or go to one of the shops springing up all over the U.S. that specialize in custom installations of balanced and matched sound systems. Generally, they assemble components, do any cabinet work to fit in with the design of the home—and guarantee maximum performance for what they sell.

• **The Small Shop**—Typical of such shops is Manhattan's Electronic Workshop (pictures, page 52). Owned and operated by a young ex-Atomic Energy Commission physicist, Clifton Howard, it has been in the custom hi-fi business for only eight months. It's riding the boom high. During that time it has installed over 200 hi-fi sets in individual homes. It sells just the components of a phonograph for as little as \$95, or complete phonograph-FM units running to as high as \$567 (for the machinery alone).

But it won't be too long before anyone will be able to buy reliable packaged sound units. Electronic Workshop is working on one that it hopes to sell through big retail outlets. It will consist of a sound system with every piece matched, plus a set of plans for several different cabinet designs. The big commercial companies are getting wise to what's going on, too. Stromberg-Carlson Co., for instance, plans to introduce a new line of matched hi-fi units next fall.



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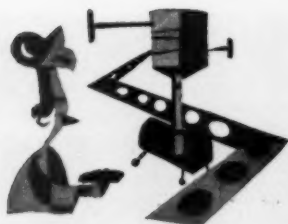
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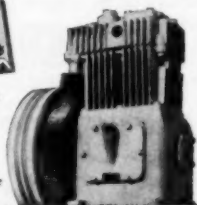
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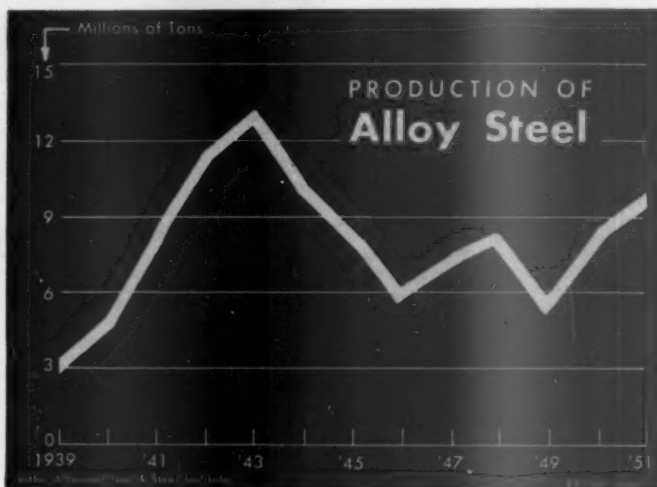
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Alloys: We Don't Have Enough

The ones that are scarcest are the ones we need most for tough high-temperature steels. There's no telling how much we could use of some alloys if we could only get them.

When you're building aircraft, tanks, and guns, you need much tougher and more heat-resistant steels than when you're making automobiles and refrigerators. And the way you get metal of that sort is to shovel in a bigger load of alloy elements.

There are about a dozen steel alloying materials in all. Some are in abundant supply; others range all the way down to extreme scarcity. Unfortunately, the ones that are in greatest demand are among the scarcest.

Here's about how the dozen alloys stack up:

All we can use—tellurium, zirconium, boron, silicon. Boron has had a big buildup as a substitute for scarcer alloys, but still a couple of weeks' output of boron can take care of all its use in steel alloys. You can get all the silicon you want at any time, by digging up some quartz and throwing in a little pig iron. Whenever we need more tellurium or zirconium, we can boost the supply to meet the demand, but they're of minor importance.

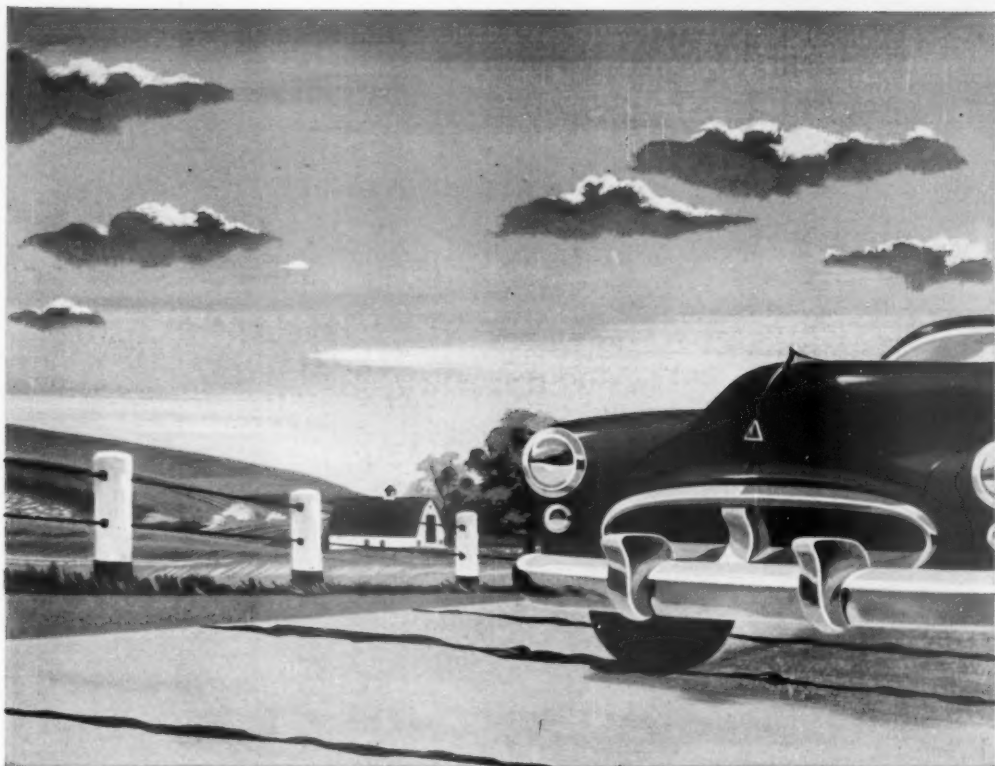
Barely enough—chrome, manganese, tungsten, molybdenum. The last-named alloy is tight mainly because it's being used heavily as a substitute for tungsten. All are just about ample to take care of minimum needs.

Critically short—cobalt, nickel, columbium, tantalum. The outlook for these metals is dim as far as you can see into the future. All four are chiefly dependent on imports, and building up supplies is a slow process. At the same time, all four will be increasingly needed for heat-resistant metals.

• **Test to Come**—Even those metals that are in approximate balance could tighten up almost overnight. In most cases, it will be years before supplies can be boosted appreciably, but the demand is on a fast rising curve. The mills aren't yet turning out so much alloy steel as they did during World War II (chart); the peak of the rearmament drive is yet to come. As the defense program gives impetus to the rise in steel output, more and more alloying materials will be needed to keep pace.

How arms production affects the alloys can be seen by a look at figures for alloy steel output. In 1939 alloy steel output was a little more than 3-million tons; by 1943, when arms making was at its height, production exceeded 13-million tons.

It isn't just total tonnage of steel that counts, either. Equally important is the amount of alloy that goes into the steel. For example, output of high-



Why doesn't somebody stop that...
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If you've ever ridden on a concrete highway, you know that sound... the thump-thumping of your wheels on the road. It's caused by swelling of the asphalt used to seal the expansion joints. These bumps not only irritate drivers and put "squeaks" in your car—they actually irritate the road! But they're unavoidable...

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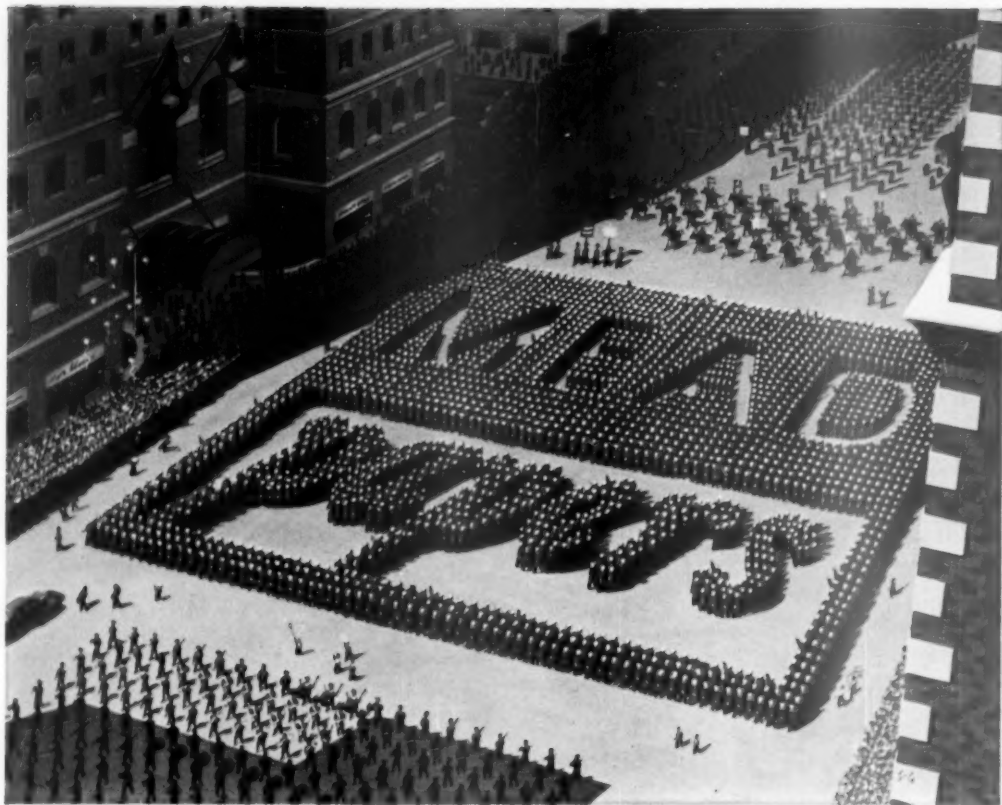
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"... The government has to keep up a strategic stockpile, too..."

ALLOYS starts on p. 56

alloy castings has more than doubled in the past two years and is already well above its previous peaks in World War II.

Modern weapons require steels with a hardness not even aimed at during the last war. One of the metals used most heavily in jet engines contains more alloying materials than steel: about 44% cobalt, 20% nickel, 20% chrome, 14% tungsten, molybdenum, columbium, tantalum, manganese, and silicon. Only about 3% is iron.

• **Stockpile**—Big demand from the military—and from civilian industry—for the ferroalloys is only part of the story. The government has to keep up a strategic stockpile, too. It's a good customer for all the alloying materials except silicon and phosphorus. And the only reason some of the alloys aren't even scarcer than they are is that when things get really tight the government eases up on its rate of demand for the stockpile.

Some day, when the stockpile gets built up to its target level, there will be a big batch of alloys available for industry rather than for the stockpile. But that's at least a couple of years away.

By that time the long-range programs of the Defense Materials Procurement Agency should start paying off in increased domestic and foreign supplies, and supplies may be plentiful anyway.

• **The Field**—Here's how the picture shapes up for the more important alloying materials:

Nickel is the scarcest of all the major alloys. It's caught in a triple squeeze: (1) Demand soared as war production got under way, (2) supplies did not increase, (3) the stockpile is hungry for nickel.

The steel industry chews up about half the supply of nickel, and the non-ferrous alloys take up about half of what's left. Even in low-alloy steels, there's about three times as much nickel for military goods as for civilian products. Yet the U. S. produces almost no nickel, and 1951 imports were only a trifle higher than in 1950.

Strict government allocations cut back the industry's use of nickel in 1951 to 20% less than the 1950 use. Industry was allowed to consume only 80,000 tons last year out of 93,000 tons imported; the difference presumably went into the stockpile.

Canadian production of nickel accounts for 90% of our imports. It will

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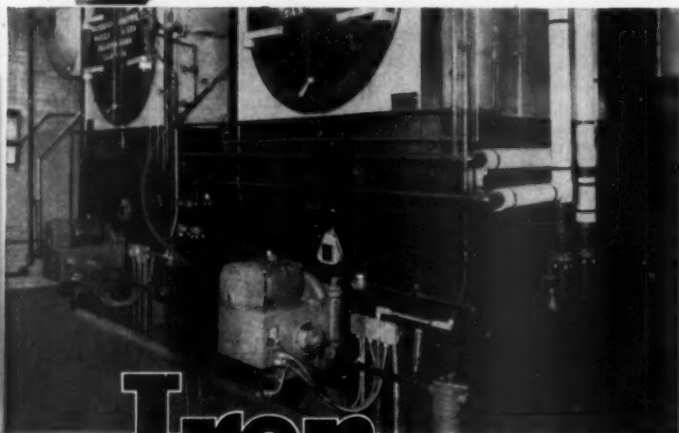
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"... cobalt recovery from domestic sources is increasing fast ..."

ALLOYS starts on p. 56

keep on rising for at least a couple of years. And Cuba has gone into production of about 15,000 tons a year (BW—Mar. 1 '52, p140). Yet needs are increasing faster than supplies.

Cobalt is probably the most important alloying metal of all. Jet engines are practically built around cobalt—some alloys going into jets contain as much as 67% of the tough metal.

As in the case on nickel, demand is shooting up even faster than supply. In 1939, the best prewar year, we used 2.7-million lb.; during the war consumption went to 5.6-million lb.; last year the figure was 9.9-million lb. It would have gone a lot higher if the metal had been available.

Cobalt is nearly 100% limited to arms use, especially for high-temperature alloys. These alloys in 1949 used 1.2-million lb., jumped to 2.2-million lb. in 1950 and to 4.9-million lb. in 1951.

Most of our cobalt comes from the Belgian Congo (BW—Feb. 9 '52, p145), where it occurs in combination with copper. Up to now, the U.S. has produced only a fraction of the cobalt it needs, but recovery from domestic sources is increasing fast (BW—Jul. 28 '51, p70). By summer, output will be running around one-third of last year's total consumption, and another 10% gain in domestic production is scheduled for next year.

Tungsten is in fair supply, with both imports and domestic output increasing steadily. But some of the ease in supply is more apparent than real: There's enough only because of restrictions on use. As with other alloys, if everyone who wanted tungsten could go into the market to get it, supplies would immediately be drum-tight. It will probably be well into 1953—if then—before there's enough tungsten for everybody.

Tungsten is in a delicately balanced market position. Increase in supplies is hung largely on the great price increase—from \$18 before Korea to \$65 today for a 20-lb. unit. The government guarantees \$63 per unit for the next 4 1/2 years. Yet a pickup in arms making could produce a demand that no mere cash inducement could fill overnight.

Molybdenum is in much the same spot as tungsten—right on the edge between barely enough and seriously short. The U.S. produces most of the world's supply, but our output is under continual pressure. "Moly" is a



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good substitute for tungsten and nickel, and demand increased between 1949 and 1951 at an even greater rate than production, which went from 22.5-million lb. to 38.9-million lb. in that period. Increasing output this year should end the worst of the shortage—for a while.

Cromite has been bolstered by a 10% increase in imports during 1951. Almost all of it has to be imported. The outlook: Foreign supplies should increase, and some domestic production should build up under DMPA contracts. Supplies are expected to stay fairly good.

Manganese shows a good balance between supply and demand. About 90% comes from overseas, and imports are holding up well. Other countries have filled the gap left by cutting off Russian ores in 1949.

Long-run, supplies should increase enough to take care of all needs. There's plenty of manganese overseas; political and transportation problems just have to be licked. DMPA is encouraging domestic production through liberal contracts. A process to recover manganese from steel-mill slag is being worked out; it alone may someday fill half our total needs.

Short-run, there can still be trouble in finding enough of this heavily used metal. There's enough now only because of government restrictions on its use, the using up of inventories, and the skimming of best grades from industry's stockpiles.

Columbium and **tantalum** are both critically short. The U.S. must import 99% of its supply. The tonnages used aren't very high, but both metals have extremely strategic uses.

Columbium goes into jet engines and gas turbines. Tantalum is widely used in electronic equipment, surgical instruments, and special tools. There are a lot of new uses, too, for both metals that can't be developed because there isn't enough of either metal to play with. Both will stay short for a long time.

Some of the present uses of columbium and tantalum may eventually be taken over by the new wonder metal, titanium (BW—Jul.21'51,p62). But titanium itself is going to be just as scarce as they are for the next few years, at least.

Vanadium is in fairly easy supply. Most of this alloying metal goes into high-speed steels. Ever since 1947 the government has kept the production figures secret. That's because one method of getting vanadium is to recover it in conjunction with uranium, and disclosure of vanadium production might give a clue to uranium output. Indications are, however, that there should be enough vanadium for foreseeable needs.

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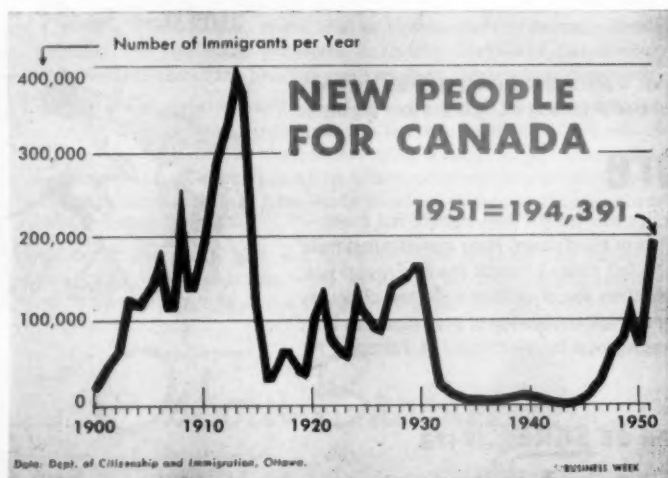
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CANADA



Big-Boned

Last year, Canada stepped up to have its population portrait snapped. In June, census takers visited homes from the tip of Newfoundland to Vancouver Island, from the Great Lakes to the Yukon.

The final count came in last month: Canada has a population of 14,009,429, up 22% over 1941, the largest numerical increase—2,502,774—on record. Since the turn of the century, Canada has tripled in size.

• **Big Promise**—Some Canadians don't think that's nearly enough growth. The idea that "the 20th Century belongs to Canada," that Canada is "on the threshold of a rapid and almost incredible economic expansion" has seeped into the national consciousness. The only way to use that promise, Canadians believe, is to get more peo-



Country Adds Some Muscle

ple—people to work new resources, staff new industry, grow more food, create the kind of mass market that made the U.S. strong.

Canadians, as a rule, aren't given to making rash statements about how their country will look in, say, 1975 or 2000. But they're doing a lot of thinking on population trends, immigration, emigration. Businessmen, in the U.S. as well as Canada, are pondering the shape of the market and manpower situation to come.

Here's a rough sketch of the outlook, as of March, 1952:

- Canada will keep growing fast. A sound estimate might be 25-million to 30-million people by 1975.

- Though some provinces now are growing faster than others, no sweeping redistribution of population is in the

cards. The center of gravity will remain in southern Ontario and southern Quebec, Canada's industrial heartland.

- A lot will depend on immigration. Last year brought 194,391 new Canadians, the largest batch since 1913.

- Emigration to the U.S.—especially of young professional people and skilled hands—is a serious problem.


- Under present world economic conditions, supply and demand for labor seems in fair balance. There are seasonal factors that cause dislocation in the winter. But there is no area where business need fear a big labor surplus or a serious shortage.

I. Trends

There were only 79 white people in Canada back in 1604—plus uncounted

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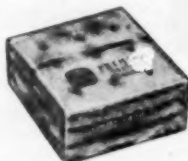


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"... over half the population lives on a 100-mi. strip along the U.S. border . . ."

CANADA starts on p. 64

Indians. The growth to 14-million has been cyclical; high points coincided with the American Revolution (when Tories fled to the safety of the Crown), the Irish famine, railway building, and the settlement of the West. Perhaps a third period is at hand, as Canada comes of age as a world industrial power.

Canada supports only 0.53% of the world's population. Theoretically—figuring it as the third-largest nation in the world in land area, it should support 190-million as its share of the human race. But that's pure theory. Much of Canada is rocky, cold, uninhabitable for large groups. Well over half the population lives on a 100-mi. strip along the U.S. border; most of the rest lives within 200 mi. of the U. S.

But within that strip, there's tremendous growth potential. One Canadian businessman says a minimum of 50-million to 75-million people would be in balance with Canada's natural wealth. One expert figures within the next 20 years Canada's natural increase will be 7-million, and Canada could and should add 13-million immigrants, bringing the population up to 34-million.

• **Empty Places**—Where would these new people fit in? Over half of them will wind up in southern Ontario and Quebec. Well over one-half will gravitate to cities and towns. Canada's urban areas are growing bigger as Canadians desert the farms. In 1941, some 54% lived in urban areas; census figures due by yearend will push the total over 60%. Though final figures aren't yet available, the top metropolitan areas look like this:

Montreal	1,400,000
Toronto	950,000
Vancouver	524,000
Winnipeg	350,924
Quebec	271,236
Hamilton	207,544

Here's an area by area scorecard of Canadian growth:

British Columbia is Canada's fastest-growing province: Population is up 42.5% since 1941. Canadians, like Americans, like to go west; and the climate around Vancouver is Canada's mildest. B.C. has taken giant steps in development of its forest, power, and mineral resources, is busy enticing new industry to back them up. But there are inhibiting factors: Much of B.C. is cold and mountainous. There's sharp seasonal employment slowdown, and, too, B.C.'s products—lumber, metals,

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etc.—are especially prey to a severe drop in world demand.

The Prairie Provinces: Alberta has shot ahead, up 18%. Chalk that up to the oil and gas boom, and to new industries clustering around Edmonton. Furthermore, Edmonton is the gateway to the Yukon and the Northwest Territories, now opening up to new development (1951 population: 25,100, up 8,000 from 1941). Saskatchewan, almost solely a farm province, lost population, reflecting the drift from farm to town. Oil finds, new mining developments may help regain the balance. Manitoba rose 6%. There's new industry around its capital city, Winnipeg—Canada's granary. Like Saskatchewan, Manitoba reflects the drift to cities. All in all, the prairies are in line for growth—especially Alberta. But they won't get the industry and population that B.C. and the East will.

Ontario and Quebec, each with a 22% rise since 1941, will remain the heavyweights. They have the transport and communications, the power, the mines and paper mills, the overwhelming bulk of Canadian industry. And they have the mass markets—though the Quebec market is different from any other in Canada. On the whole, French-Canadian society is more European than American. Quebec people are less receptive to modern appliances and new gadgets.

Even with 62% of Canada's population, these two provinces have vast stretches of lonely land waiting for people, plenty of room for growth back from the lakeshore and the St. Lawrence. A topnotch Canadian economist thinks there may be 25-million people in the area by 1975.

The Maritimes and Newfoundland: New Brunswick, Prince Edward Island, and Nova Scotia are economically a little like our northern New England. Their growth has been a steady natural one, with few immigrants. Their economy is on the depressed side, far from central markets, suffering from dwindling European markets. Their area is the most stable, populationwise, in Canada; families don't like to move. Newfoundland, especially, is going all-out for new industry to balance its fish and pulp-paper economy. But the drive won't net a big population increase.

II. Immigrants

Canada's population outlook hangs directly on immigration; natural birth-rate can't provide the people Canada needs. Most Canadians are aware of this. Last year, they welcomed 194,391 persons. They've taken in over 600,000 since the war. That percentage applied to the U.S. would mean an immigrant total of 7-million.

The floodtide of Canadian immigra-



On a Cooper-Bessemer engine test floor, these visitors from a large rural electric cooperative watch one of their new engines demonstrate unprecedented fuel economy.

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"... Canada wants skilled
engineers, designers, crafts-
men ..."

CANADA starts on p. 64

tion came in the early 1900s, as Canada built an agricultural economy in the West. After the war, immigration faltered, hit rock bottom during the depression and World War II. Since the war, many Canadians have realized the need for a speedup.

• **Degree of Control**—In 1950, immigration regulations were eased, a ban on German nationals was lifted. What Canada wants are people easily assimilated, who like the climate, who won't "disturb the fundamental character of the Canadian people." That means British and Northern European stock. Germans, especially, have done well in Canada. Last year, 32,000 came in—1,000 more than the preferred United Kingdom group.

Canada wants skilled engineers, designers, craftsmen. For the mass of newcomers, Canada wants people to go to the farms, the mines, the woods, into domestic service, into the industrial jobs that Canadians don't like. Industry—especially aircraft and shipbuilding—is on the lookout for skilled workers. Businessmen keep the immigration offices posted on their needs.

• **How Many?**—Future immigration depends on what Canadians call their "absorptive capacity." There's disagreement on what that means. Some say that 200,000 to 300,000 yearly could be put to work; others, mainly labor groups, think that last year's batch was too much, caused this winter's unemployment figure to rise.

It's safe to say that last year's influx didn't strain Canada too much. The Dept. of Citizenship & Immigration at Ottawa points out that there have never been more than 3,662 people in its hostels for unabsorbed immigrants. And the immigration people boast that, in some areas, the arrival of highly skilled newcomers has broken bottlenecks and increased the number of jobs available for Canadians.

III. ... and Emigration

Canadians have been worried about loss of population. In the past 10 years, roughly 362,000 have left Canada. Most of them went to the U.S., a land of milk and honey in the eyes of many younger people.

It's the loss of young professional men and skilled hands that particularly disturbs Canada. Of the 26,000 or so persons who emigrated during the fiscal year 1951, 2,900 were professionals or semiprofessionals, 3,500 clerical and

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sales people, 1,600 craftsmen and foremen. A lot were engineers and nurses—precisely the people Canada needs most acutely.

• **Why?**—The reason is simple. Wage scales and living standards are higher generally in the U.S.; “faraway hills” seem to offer more opportunities. The U.S. isn’t thought of as “foreign.” Many a Canadian is a lot closer to U.S. jobs and plants than he is to Toronto, or Montreal. For young scientists and engineers, there’s the lure of U.S. research and study facilities.

On balance, Canada is gaining a lot more people than it is losing—plenty of Americans have heeded a call to Canada. And it seems to be holding its own in regard to professionals. As for the departing youth, one old-hand Canadian labor expert feels that they’re the “best possible missionaries for Canada; a lot of them will acquire new skills and return to us.” Meantime, Canadian businessmen are stressing to young college people the unlimited opportunities in their own back yard.

IV. Manpower

It’s practically impossible to draw a long-term picture of Canada’s manpower supply. As the third-largest trading nation in the world, all bets would be off if there’s a drop in demand for Canada’s products. But you can make two general statements:

(1) In the summer, supply and demand for labor is pretty well in balance. There’s a continuing need for the highly skilled and professional class. There are bound to be spots of unemployment here and there. But last summer, Canada had 5.4-million persons at work, more than ever before. Much the same outlook stands for 1952. In all, there’s no large chronic surplus or shortage area.

(2) In the past few months, there have been up to 400,000 Canadians hunting for jobs. Much of that number is due to the economic overhead of the Canadian winter—which cuts fishing, construction, logging, stevedoring. Add to that some dislocation due to defense retooling and a recent easing in consumer purchases of hard goods.

• **Plans**—Canadian labor people figure they can do a lot to improve things—working toward an irreducible minimum of maybe 120,000 unemployed. The National Advisory Council on Manpower met late last month in Ottawa, discussed: (1) boosting enrolment in engineering courses, (2) increasing the number of apprentices in skilled trades, (3) stabilizing the farm labor force, (4) urging business to help level the peaks and valleys of seasonal unemployment, and (5) speeding the movement of workers to and from industries having peaks at different times of year.

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From the Salt of the Earth

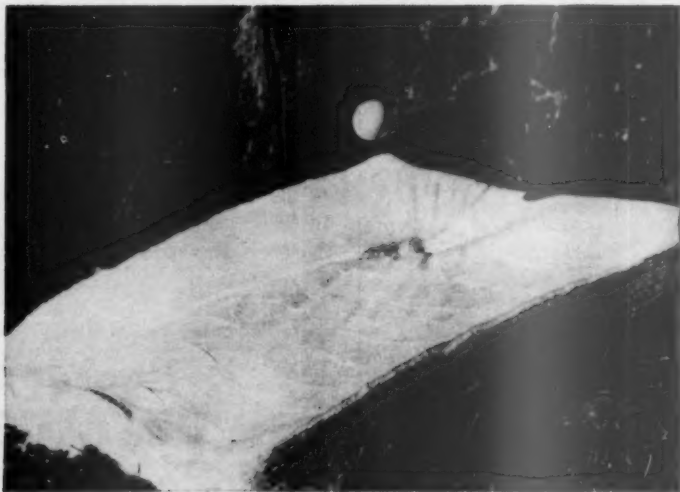
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Ever See a Raw Egg Drop 25 Feet and BOUNCE?



(left) THERE GOES THE RAW EGG—from a roof-top 25 feet above the ground. (above) EGG BOUNCES! Photo taken split second after raw egg landed on 2-inch thickness of CELLULINER.

New cushioning material provides 4 times the packaging protection of Creped Wadding

When the Army, Navy and Air Force went hunting for a better protective packaging material last Spring, they found it in CELLULINER, a new product developed after many years of research by The Gilman Brothers Company of Gilman, Connecticut.

Test after test showed that CELLULINER had a compressive resilience of 71.4%. Creped wadding, the material commonly used for interior packaging, tests at only 17.8%. Special Gilman processes can also make CELLULINER mildew-proof and flame-proof. Today, millions of feet of CELLULINER are being used by the Armed Forces.

CELLULINER comes in two basic types: the *absorbent* type takes up over 16 times its weight in water; the *non-absorbent* type takes up under 2.4 times its weight

and actually floats indefinitely. Both are soft, clean, flexible, chemically neutral (average H-ion concentration 6.8).

Finally, CELLULINER *insulates*—it's the most efficient barrier to heat and cold ever offered in a commercial interior packaging material.

• **Costs are in line.** Despite its 300% greater protective capacity, which cuts packing and shipping costs and losses from breakage or damage in transit, CELLULINER costs about the same per square foot as creped wadding. Users get 4 times the protection per packaging dollar or need to use far less material.

(right) President Lawrence M. Gilman of The Gilman Brothers Co. holds 1-inch thickness of flame-proofed CELLULINER against acetylene flame hot enough to melt steel. Only outer layer chars — his bare hand is safe against 2000° flame!



(Advertisement)

CELLULINER

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SAVES YOU MONEY

...on every package!
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Whatever your packaging problem—floitation, blocking and bracing, or surface protection, CELLULINER's 300% greater compressive resilience saves you money. You get 4 times the protection of creped wadding! You cut breakage and damage losses, or, since CELLULINER's cost is about the same as creped wadding, you save by safely using far less! And CELLULINER's resilience lasts! CELLULINER stands up under heavy loads and repeated shocks—never develops "permanent set." That's why Army, Navy and Air Force are using millions of feet—why scores of major U.S. firms specify CELLULINER for all their plants!

CELLULINER FACTS

Comes in rolls or sheets 4" to 80" wide, .125" to 2.0" thick—or can be die-cut to any special shape at factory. Faced and backed with tissue, creped Kraft, rust-resistant or anti-tarnish paper, corrugated board, muslin or plastic to meet specific needs in either absorbent or non-absorbent types. Meets or exceeds Fed. Spec. UU-C-843. Can be flame-proofed to withstand acetylene torch temperatures above 2000° F. and/or mildew-proofed to meet or exceed Mil. Spec. MIL-F-5030. Chemically neutral, won't tarnish, corrode or chemically alter any material or product. Light, clean, soft, flexible, strong.

WHAT CELLULINER IS

A precisely manufactured cushioning material, made by special Gilman processes, from cotton, nature's own tubular form of cellulose. CELLULINER's very high compressive resilience comes in part from this tubular structure—for the hollow tube is the lightest, strongest, most resilient structural form. Cotton's high insulating capacity helps to make CELLULINER the most efficient barrier to heat and cold commercially available in an interior packaging material. Made only by

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Please give me more information about
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MAKING SABREJETS IN MONTREAL:

Electric Boat Likes Canada

Canadair, Ltd., Canada's largest aircraft producer, is owned and operated by the Electric Boat Co., U.S. submarine manufacturer. Yet you might think it was a pure-bred Canadian company, the way Canadians like to talk about it.

Said a Montreal cab driver: "This Canadair—it is the biggest factory in Canada, in the world, even."

Said a top-ranking government official in Ottawa: "Canadair's record is excellent. I'd think it was the most efficient producer of airframes on the continent."

• **Leader**—Actually, Canadair's sprawling layout on the outskirts of Montreal (two plants, 40 acres of covered floor space) is far from the world's largest plant. Perhaps it's not the most efficient airframe producer. But it is establishing a reputation that's hard to beat; and has taken the lead in Canada's fledgling aircraft industry.

This week or next, Canadair will deliver its 200th F-86-E Sabrejet, to the Royal Canadian Air Force. Last month it got two important orders for Sabrejets: a token order from the U.S. Air Force for immediate delivery, a larger one to supply fighters to Britain under the Mutual Security Program. Also, Canadair has just about finished tooling up to produce T-33 jet trainers for Canada and, under an agreement with the Beech Aircraft Corp., T-36 twin-

engine trainers for the USAF. If that weren't enough, Canadair engineers are burning the midnight oil readying blueprints for a compact, twin-engine transport to lay before the world's airlines.

Electric Boat Co. (which is changing its name soon to General Dynamics Corp.) is pleased—and maybe a bit surprised—with the way its Canadian venture is panning out. And it's full of praise for Canada. "It's a real capitalist country," says one official, "working with the government there is easy—very businesslike on tax and renegotiation matters." Electric Boat likes Canadian labor, thinks its Montreal workers turn out as much as or more than U.S. people would. And it gets along well with its 60 or 70 subcontractors. Ford of Canada is the largest, working on wings for the T-33.

• **Over Half**—Actually, in five years, the Canadair offspring has grown taller than the Electric Boat Co. parent. This year Electric Boat believes it will do a \$100-million business—more than half of that through Canadair. The backlog for the entire outfit runs around \$333-million.

Its wartime submarine and PT boat business is little help to Electric Boat Co. when peace comes. And the solid electric motor business, which the company has done since 1880, isn't enough by itself to hold on to skilled engineers and craftsmen. Electric Boat has had



Air switches are those towering devices used on high voltage transmission lines to open and close power circuits. The one illustrated above is the largest air switch ever made. Sixteen of them were built by Delta-Star for installation in the transmission lines between Boulder Dam and Los Angeles.

For more than 40 years, Delta-Star has pioneered in the development of improved equipment for the transmission and control of electric power in central stations and industrial plants.

Today, Delta-Star equipment is in use in a large part of the country's power facilities.

DELTA-STAR ELECTRIC COMPANY

ESTABLISHED 1908

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to improvise and diversify. One post-war move was to produce offset presses; another was fabricating highway bridges. But the biggest plunge of all was into the Canadian aircraft industry—a chancy business at best in 1947.

• **Bombers**—The Canadian government had built the Canadair plant in 1942, to turn out the Canadian version of the Catalina naval patrol bomber. Canadian Vickers, the shipbuilder, ran the plant. In 1944 a management company was formed to take it over. Postwar, Canadair got started building the North Star, a four-engine transport merging the DC-4 and DC-6 designs under license from Douglas Aircraft. But Ottawa, which owned the plant, wasn't too pleased by the way things were going. There was even talk of turning it over to auto assembly or letting it gather dust as a warehouse.

Ottawa was anxious to turn over its war-baby to private enterprise, tried in vain to interest Canadian businessmen. Then Electric Boat hove into view. Ottawa liked the outfit—even though it had no aircraft experience. One senior government official explains it: "There was a company used to wartime boom and peacetime bust, used to doing business with governments, used to tackling new projects."

• **Aggressive**—Electric Boat stepped up and bought the plant. Why? A Canadair official says: "Electric Boat—and particularly its president, John Jay Hopkins—is aggressive, saw a good facility standing idle, decided to make something out of it or bust. We didn't bust."

Electric Boat—and Ottawa—got a good deal. The Canadian government was paid \$4-million; Electric Boat added another \$2-million for Canadair's working capital. Since, Canadair has taken up an option on some more of the plant and equipment, represented now by a \$3.6-million mortgage held by Ottawa.

Hopkins and company moved in fast, brought together an executive office loaded with aircraft savvy, to merge with people already on hand at Canadair. A cosmopolitan engineering team was whipped together—which now includes U.S., Canadian, British, and Dutch talent. A spare parts business, now running some \$5-million yearly, was developed, supplying DC-3s and C-47s around the world under a deal with Douglas. The new team got cracking on the North Star program for Trans Canada Airlines, British Overseas Airways, Canadian Pacific Air Lines, and the RCAF. All in all, the Canadair plant turned out 71 North Stars and converted some 250 C-47s to civilian use. At one point, Canadair delivered 22 North Stars to BOAC eight months ahead of schedule. The British had taken the de-

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sparks the sale



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Du Pont Color Conditioning boosts output by improving efficiency, safety and morale

Du Pont Color Conditioning doesn't add a dime to your maintenance-painting costs. In fact, applying this scientific painting plan costs less than ordinary maintenance painting in the long run. That's why every industrial worker should enjoy the better seeing and working conditions that Color Conditioning provides... and industrial management should have the resulting rewards in terms of better labor relations, greater out-

put per man-hour, bigger profits.

Throughout hundreds of industrial plants, the value of Color Conditioning is being proved every day. In work areas and offices, it raises both the quantity and quality of production. In cafeterias, wash rooms and recreation areas, it raises employee morale. And everywhere Color Conditioning raises safety standards by pointing up danger areas.

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installations, too. In schools and hospitals, the correct use of color and light means less eyestrain, greater comfort, better work. In stores, restaurants and hotels, Color Conditioning helps attract buyers or patronage.

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livery date with a grain of salt, were horrified when the unexpected planes showed up.

Canadair would have had tougher sledding if it weren't for the cold war—and Korea. In 1949 the first RCAF order for F-86s, under a license with North American Aviation, Inc., set Canadair rolling. Since, orders have multiplied; Canadair now turns out 20 Sabrejets monthly. If it could get more engines—from General Electric in the U.S.—the output might be higher. As it is, production will pick up by yearend, along with the T-33 and T-36 programs (perhaps 60 planes monthly). All told, Canadair plans to double its 9,000-man work force by December.

• **Room for More**—Walking around the Canadair plant, you get the impression that it's only working at half-speed. The layout is neat and orderly—with room for growth. If all-out war should come, a fair guess for Canadair production might be four or five times present output.

Today Canadair has most of its eggs in the military basket. But it's preparing for more-or-less peaceful days to come. Canadair brass (Canadian engineer J. Geoffrey Notman recently moved up to president and general manager; former president and chairman Hopkins remains as chairman) think that military orders may begin to dwindle by 1955—if all goes well. By that time, they hope to bring out a commercial plane. They figure there's a huge market around the world waiting for an economical, flexible twin-engine transport to replace aging DC-3s.

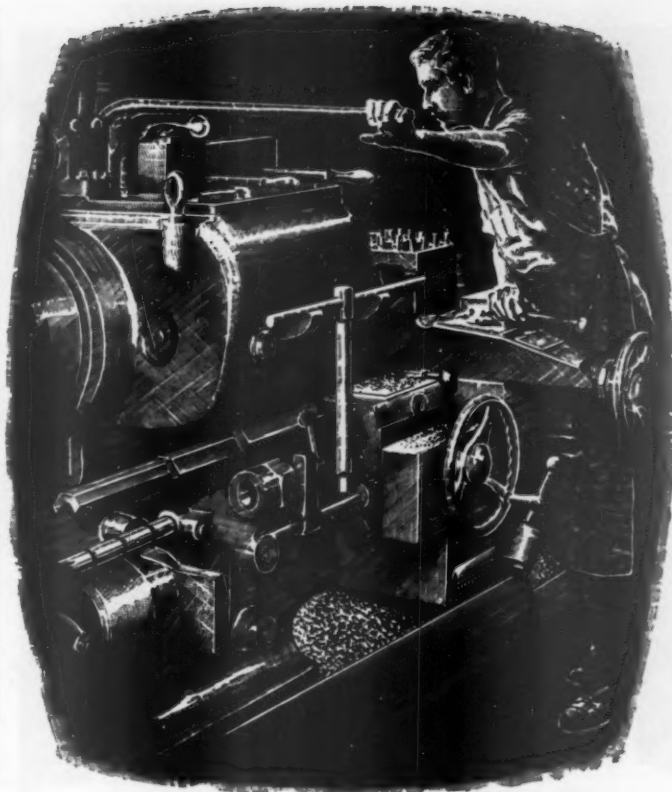
CANADA BRIEFS

Canada's lusty dollar hit its highest level since the 1930s last week, was quoted once in New York at \$1.00692. Behind the surge: steady U.S. purchases of Canadian securities.

• **Ore from Labrador and Quebec**, says Jules Timmins, vice-president of Iron Ore Co. of Canada, will be moving to steel mills in summer, 1954. That's one year ahead of schedule. He figures the 190-mi. railroad, linking the mining area with the sea, will be just about through by yearend.

• **The Canadian toy industry** has passed the \$30-million-a-year mark, 10 times what it was in 1936, close to twice the 1946 figure. Almost 60% of the toys produced were plastic.

• **New investment:** Joy Mfg. Co., Pittsburgh producer of mining machinery, has bought control of Craig Bit Co., Ltd., North Bay, Ont. Joy has been



The Principal Product of Taft-Peirce *is SKILL*

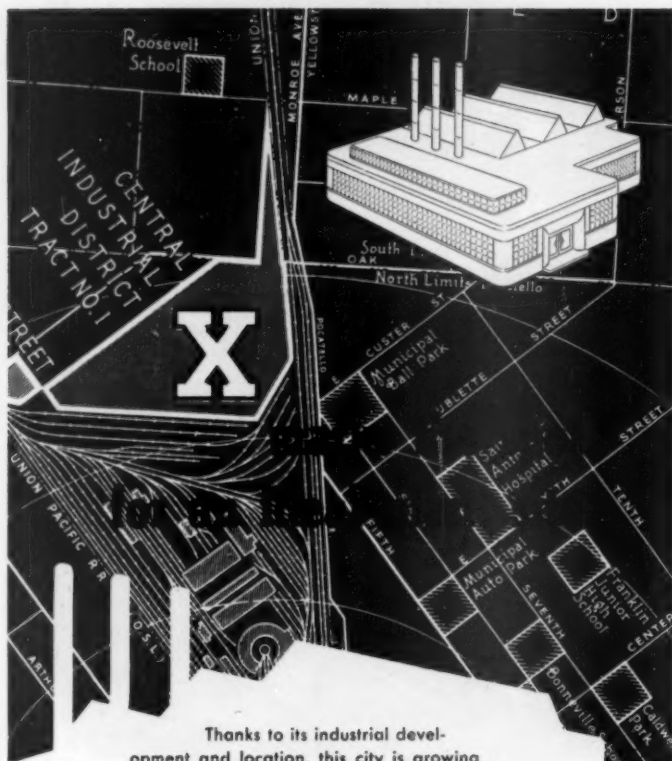
Basically, Taft-Peirce is a contract manufacturer. We have been for 75 years. With the most modern machine tools and skilled craftsmen we have done the big jobs . . . the tough jobs . . . the overflow jobs for the nation's leading companies. Whether it's one special machine or 10,000 close tolerance parts — if Taft-Peirce does it, it's done well.

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UNION PACIFIC RAILROAD

making Craig's rock drill bits in the U.S. under license. . . . Germany's Ernst Leitz Optical Co. plans a \$200,000 plant at Midland, Ont., to make Leica cameras. Walter Carveth, Canadian distributor for Leitz, is putting up some of the money, will be a director of Ernst Leitz (Canada) Ltd. . . . Federated Metals Division, American Smelting & Refining Co., has teamed up with Frankel Corp., Toronto, to form a new company to make nonferrous metal products.

New town: First homes of British Columbia's "Aluminum City"—at the Kitimat site of Aluminum Co. of Canada's huge hydro-smelter project—will rise this summer. They'll be the nucleus of a city of 50,000, once Alcan gets producing in 1954. Mayer & Whitteley, New York architects, drew the plans.

Foot-and-Mouth Disease: Canada Checks the Toll

The discovery of the dread foot-and-mouth disease among Saskatchewan cattle last month (BW-Mar. 1 '52, p28) was a severe blow to Canada. Today, even with the disease said to be "under control," Canadians have fears for the future of their livestock industry.

Here's a rundown on the outbreak's effect on Canada in the past four weeks:

- Some 1,200 head of livestock, mostly cattle, have been destroyed. Over 3,000 packinghouse workers are out of jobs.

- Interprovincial livestock and meat movements are badly clogged. Four provinces have embargoed all shipments from the affected area. Ottawa, which thinks the embargoes are unnecessary, has slapped a ban on imports from other countries to make the provinces ease up.

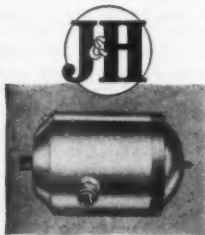
- All immigrants from areas where foot-and-mouth is prevalent, mainly Europe, are barred from entering Canada.

- The outlook for Canada's important U.S. market for meat and livestock (last year worth \$125-million) is clouded. While there's some hope in Ottawa that Washington will ease up slightly on its month-old import ban, cancellation of the ban is probably a long way off. Canadians remember that Mexico's \$400-million fight against foot-and-mouth has meant a five-year U.S. quarantine. And, too, U.S. beef-lobbyists may use the outbreak to block imports from Canada long after the disease is officially stamped out.

There's one further trouble: Once it arrives, the virus can stay with a country for years—lying dormant in the soil, in straw, on birds and buildings.

want to cool
a generator with
a blanket of steam?

JACK & HEINTZ does it!



J&H ENVIRONMENT-FREE ALTERNATOR

First successful, liquid-vaporization-cooled alternator for generation of a-c electricity at high altitudes.

Coolant, fed into hollow rotor shaft, sprays interior of machine and vaporizes. Maintains satisfactory cooling while operating in extreme conditions of temperature and altitude.

This G75 Alternator features one of three high-altitude cooling methods developed by J&H engineers.

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The problem is a paradox: To build a generator that won't burn up in the frigid outer reaches of our world. The problem exists because high-altitude speeds heat air so it cannot be used for cooling.

Jack & Heintz solved the problem by building a generator into which water is sprayed. The heat of the generator flashes the water into steam. Due to the latent heat of vaporization, a cooling action results. The generator, wrapped in this blanket of steam, operates at safe temperatures, regardless of speed or altitude.

This J&H development promises to free aircraft electrical equipment completely from environmental conditions. It represents the kind of pioneering that has made Jack & Heintz the name to think of first when you want to put more power into less space and weight—and into unfavorable environment.

For a good idea of the way J&H works, let us send you the illustrated booklet, "Jack & Heintz Does It". Jack & Heintz, Inc., Dept. 351, Cleveland 1, Ohio.

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READERS REPORT

TB Wonder Drug

Dear Sirs:

This is written in the hope that BUSINESS WEEK will grant me space to correct certain statements and implications made in its article on the new anti-tuberculosis drugs [BW—Mar. 1 '52, p22].

The article states that the story of the drugs was broken "long before the drugs had been tested to anywhere near the degree that scientists like"; that while "other hospitals followed the usual procedure of conducting animal experiments before trying it on patients" New York City's Sea View Hospital immediately "began giving it to some of its 'hopeless' tuberculosis patients." Further, the article states, the Sea View patients showed such remarkable improvement that I "was impelled to announce the good news three months ahead of time."

The above, in effect, utterly discredits the experimental work done at Sea View and makes me appear a publicity-seeking buffoon.

The facts, if you are interested in facts, are the following:

The so-called prematurity of the disclosure of the new drugs stemmed from the fact that the Department of Hospitals and the drugs' manufacturer, Hoffmann-La Roche, Inc., had planned to make the announcement at a medical symposium on Apr. 1. The story was not premature because the drugs had not been tested sufficiently to warrant publication. It was premature simply because it got out before we had planned it to. There was no question in anyone's mind but that the drugs had shown themselves of sufficient importance to be described to the medical profession and, it follows, the general public. As to my being "impelled to announce" the story months ahead of time, the story was broken exclusively by the New York Times after days of digging by a hardworking reporter who got no information at all from me. It is, you know, characteristic of a free press that news is not always as firmly controlled as people concerned in a particular story might wish it to be. When nearly 200 dying people suddenly show dramatic improvement, they, their friends and relatives, nurses, porters, hospital attendants, etc. cannot be restrained from talking. Indeed, it is rather astonishing the story was kept under wraps as long as it was.

Finally, BUSINESS WEEK's implication that Sea View's doctors Edward H. Robitzek and Irving Selikoff gave the new drugs to patients without the benefit of prior animal experimenta-

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time, money,
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In simple, understandable words, plus more than a score of graphic illustrations, it explains how Magnaflux methods *detect defects* in metals and other materials—how Magnaflux makes it possible to *see below the surface*; how it makes *invisible* imperfections *visible*! ... This book tells and shows you what you need to know about all the related inspection methods and equipment *pioneered* and *perfected* by the Magnaflux Corporation.

*Seeing
Isn't Always
Believing*
... it depends on what is seen.

MAGNAFLUX
How magnetic force is
put to work to detect
defects in magnetic
materials—even when
below the surface.

MAGNAGLO
How a "line of light" is
created at any defect
to make location easy.

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How a fluorescent
penetrant works
with black light to
spot defects in
non-magnetic
metals.

STATIFLUX
How electrified parti-
cles locate defects in
ceramics, glass, plas-
tics and other non-
conductors.

PARTEK
How defects in porous
materials—concrete,
unfired clay, sintered
ware, etc.—are detect-
ed by filtered particle
inspection.

SONIZON
How sound you
can't hear meas-
ures thicknesses
you can't see.

STRESSCOAT
How a sprayed-on,
brittle coating simpli-
fies stress analysis.

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May I have a personal copy of the booklet
"Seeing Isn't Always Believing"?

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A pair of electrics haul transcontinental freight No. 263 through the Belt Mountains

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Put yourself out here in rugged Montana Canyon. Imagine you're a shepherd instead of a shipper.

Watch how silently and effortlessly this string of cars moves up Eagle Nest grade behind a team of electric locomotives. Up grade or down, stopping or starting, there's no jolt or jar . . . or damaged freight.

If you could watch the whole

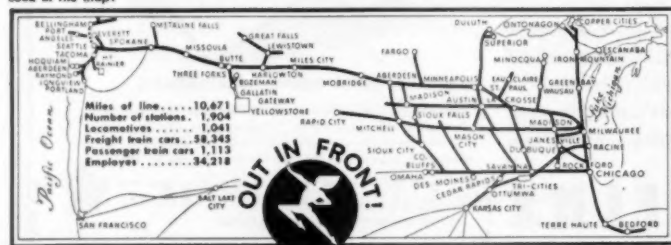
operation from the Great Lakes to Puget Sound, you'd see that The Milwaukee Road always has the right power in the right place.

Yes, that's the pattern all over the Milwaukee . . . the right car for the right cargo, the right man for the right job.

Let us prove ourselves the right railroad for you. Contact your nearest Milwaukee Road agent.

SHIP—TRAVEL

Look at the map!



THE MILWAUKEE ROAD

Route of the HIAWATHAS

CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD

tion, strikes me as being very close to libeling them. It also would indicate that Hoffmann-La Roche, a distinguished and conservative pharmaceutical firm, made the drugs available for use on humans before extensive animal studies had been made. The truth is that, while no animal work was done at Sea View itself, Dr. Robitzek and Dr. Selikoff were thoroughly informed before beginning their work of the animal studies which had been conducted so expertly by Dr. E. Grunberg, Dr. R. J. Schnitzer, and Dr. Roger Lewis, all of Hoffmann-La Roche.

I have no idea what sources of information were used by your writer. Had he or your editors observed the standard journalistic practice of soliciting comment from individuals or agencies regarding charges made against them, a great deal of misinformation might have been spared your readers. I think you owe it to the Sea View doctors, to the readers, and to me to print this letter at the earliest possible moment.

MARCUS D. KOGLER, M.D.

COMMISSIONER

NEW YORK CITY DEPT. OF HOSPITALS

• Here is the record: Three months ago, Dr. Kogel said in an annual report: "The present trend in modern TB treatment justifies the hope that the need for TB beds may . . . decline in New York City." This was the first published hint that new TB treatment was in the works. On Feb. 21, in at least two New York newspapers, Dr. Kogel was credited for revealing the drug and quoted on the results of its use. This was the first mention of the drug by the press.

More Security

Gentlemen:

I was very much surprised at several of the statements in the article "More Security" [BW—Feb. 23 '52, p150].

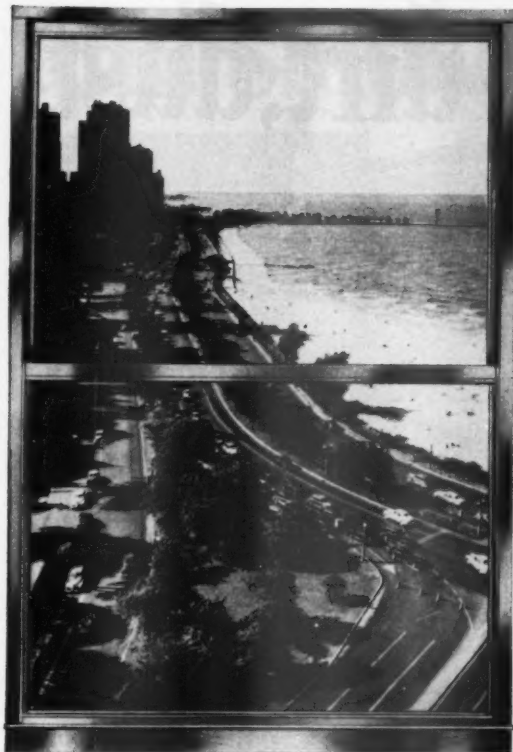
Your article indicates that a [social security] death benefit is payable upon death at any time after coverage under the law for 1½ years. Am I not correct in my understanding that in order to continue to be "currently insured," and eligible for death benefits, it is necessary (for anyone not "fully insured") that the six quarters (1½ years) of coverage you mention be within the 13-quarter period ending with the period in which death occurs?

The most surprising statement of all is the one to the effect that one can collect retirement benefits if one retires after 40 quarters of coverage, or even if the total quarters of coverage merely exceed the noncovered quarters after Jan. 1, 1951. What about the most important of all the requirements: (1) that no retirement benefits are pay-

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aluminum windows



Literally, ADLAKE Aluminum Windows pay for themselves by eliminating all maintenance costs except routine washing. Once installed, they'll keep their clean-cut good looks and easy operation for the life of the building, with no need of painting or other upkeep whatsoever!

And ADLAKE construction assures a perfect weather seal throughout the life of the window. The exclusive combination of woven-pile weather stripping and patented serrated guides gives snug protection against wind and weather, plus lasting fingertip control.

Whether used as original installations in new buildings or for replacement in older buildings ADLAKE aluminum windows assure extra value, beauty and efficiency. Write today for full details—you'll find ADLAKE representatives in most major cities.



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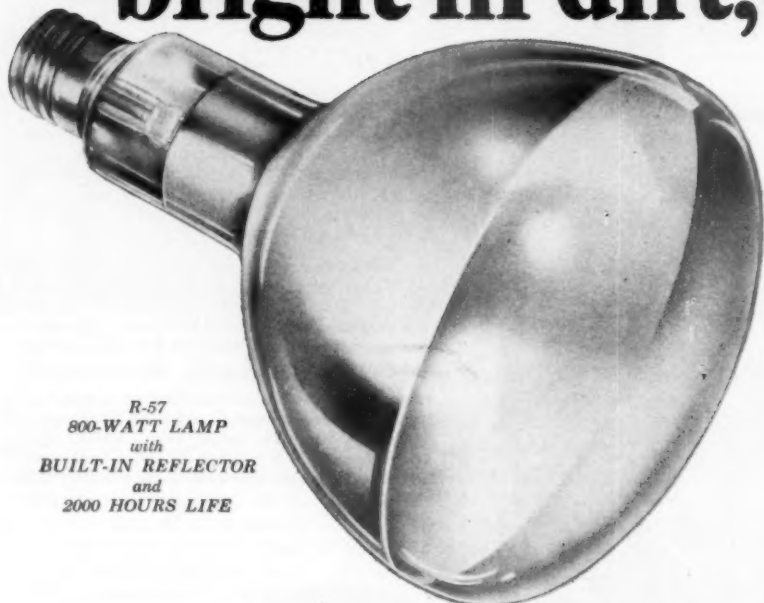


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AMERICAN RAILROADS...
ADLAKE Double-Glazed
Windows, with exclusive
"Breather" device, assure
passengers an unclouded
view of the scenery. No
dehydrants to change, no
maintenance other than
routine washing!



IN STREET CARS, BUSES,
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gives maintenance-free
operation for the life of
the vehicle! Their deep-pile
weather stripping and ex-
clusive serrated guides
form a perfect weather
seal, and they never stick
or rattle.

New Westinghouse bright in dirt, dust,



R-57
800-WATT LAMP
with
BUILT-IN REFLECTOR
and
2000 HOURS LIFE

Now you can get bright light *longer* in high-bay areas, no matter how dirty, dusty or smoky the conditions. The new Westinghouse R-57 800-watt standard voltage lamp, with a special silvery reflector actually built inside the bulb itself, prevents dirt particles from reducing its highly efficient light output. Dust settles only on the sides, not on the light-emitting face, so no cleaning is needed.

In addition, the new R-57 lamp lasts 1000 hours longer than conventional lamps and directs all the light on the area where it is needed. It is available in two light distribution types: narrow or wide beam.

For full information, contact the Westinghouse Lamp Sales Office nearest you. Or simply mail the coupon below.

LAMP DIVISION

WESTINGHOUSE ELECTRIC CORPORATION

BLOOMFIELD, NEW JERSEY

YOU CAN BE SURE...IF IT'S

Westinghouse

lamp stays and smoke



ACTUAL EFFICIENCY STUDIES PROVE new Westinghouse R-57 800-watt lamps out-live, out-perform conventional lamps. And their special design makes them ideal, especially for high-bay lighting in foundries, mills and other industries where dust is a problem.

R-57 WESTINGHOUSE LAMPS have built-in reflector, stay bright longer with no cleaning; give more efficient light at lower cost.



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NEWS FROM WESTINGHOUSE, THE FASTEST-GROWING LAMP MANUFACTURER

by Sam Hibben



DID YOU KNOW? Owls see in near-darkness (not in total darkness, which almost never exists outdoors) because of the nature of their eyes and not the size of them. Because of two shapes of nerve-ends in the back of the eyeball, we say that humans have both "rod" vision and "cone" vision. The rods take over in dim light while the cones function in brighter light and give us color perception. Owls, cats, and other night-life have mostly or entirely "rod" vision, hence see moving objects in the dimmest lights, because apparently the nerve-rods work in bunches, thus multiplying the sensitivity.

ON THE OTHER HAND—While blackout driving proved possible but unsatisfactory in war-time, the effort of auto safety experts is to approximate daylight seeing conditions as nearly as possible—at least to make roadway objects visible as far ahead as it takes to stop your car—roughly 300 feet. Headlights today are so highly scientific that a pair of small 45-watt filaments illuminate a road area at least 20 times the largest living room. Their complexity is shown by the fact that Westinghouse Sealed Beam Headlamps, for instance, have 121 individual prisms, and all of these direct separate beams of light picked up from various parts of the reflector. I guess that makes them about 60 times as complicated as bi-focals, no?

SAFETY NOTE: If you ever blow a fuse in your car on a busy highway at night, illuminate the interior of your car with a flashlight; it makes the windows visible for a long distance, warns other motorists.

More next month.

Sam Hibben

WESTINGHOUSE LAMP DIVISION DEPT. 530
BLOOMFIELD, NEW JERSEY

I'd like to have more information about the new Westinghouse R-57 800-watt lamp.

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COMPANY.....
ADDRESS.....
CITY..... STATE.....

**BUY NOW AND SAVE!
WESTINGHOUSE
FLUORESCENT LAMPS
STILL COST YOU LESS
THAN THEY DID
IN 1940, YET BURN
SEVEN TIMES LONGER!**

PROBLEM at A. G. Spalding & Bros. Inc., Chicopee, Mass.: to produce absolutely uniform golf balls within extremely narrow tolerances.

SOLUTION: Taylor Instrumentation to automatically control sequence and duration of all ball molding operations, and record all vital temperatures and pressures on all presses at all their plants.

RESULT: Spalding's prestige protected by identical curing of every ball with minimum rejects, minimum operator attention and a big saving in time, money and materials. Taylor Instrument Companies, Rochester, N. Y. and Toronto, Canada.



Taylor Instruments

— MEAN —

ACCURACY FIRST

IN HOME AND INDUSTRY

Trade-marks that
stand for uniform
quality need
the protection of
*Taylor Automatic
Process Control!*

able before age 65, and (2) that, prior to age 75, no retirement benefits will be payable while earnings in covered employment or covered self-employment are more than \$50 per month? I am sure that all of us know persons over 65 who cannot afford to go into even semi-retirement because they do not feel that social security benefits plus \$50 per month plus income on their savings are enough to live on.

PAUL T. NORTON, JR.
WORTHINGTON, OHIO

• The principal reason for running the present story was to recall for those BUSINESS WEEK readers who are self-employed that they should not forget to file returns this month. At the time the Social Security law was amended, in 1950, BW covered in detail (BW—Jul.15'50,p92) the provisions in the law mentioned in reader Norton's letter.

What, No Sidings?

Sir:

I read with particular interest the article titled "New York: How Big Can You Get Anyway?" [BW—Feb.16'52, p136]. It . . . touched upon most of the factors which have vital bearing on New York's status as a center of commerce and industry. I must take exception, however, to two statements. One occurs on page 139: "Also, because Manhattan is an island, railroad sidings are nonexistent." Later, on page 140: "Because there are no rail sidings in Manhattan . . ."

As a matter of fact, the New York Central System has some 25 rail sidings to all types of industries lying adjacent to our West Side freight tracks from 60th Street down to the St. John's Park Freight Terminal. Some of the well-known firms with private sidings along this route are the Cudahy Packing, R. C. Williams, National Biscuit, Anheuser-Busch, Sheffield Farms, and Chrysler.

DANIEL B. PRIEST

NEWS BUREAU
NEW YORK CENTRAL SYSTEM
NEW YORK, N. Y.

• BUSINESS WEEK's office windows overlook the Central's West Side tracks, and there was no intention to slight them. But this does not alter the basic thesis of the story: that practically all New York City manufacturers are cut off from direct railway connection.

Letters should be addressed
to Readers Report Editor,
BUSINESS WEEK, 330 West 42nd
Street, New York 36, N. Y.



fine steel has specialists, too

Sensitive handling; careful compounding to an exact "prescription" — these are some of the factors that make the difference between every day steel — and the *special* steels that set Crucible apart.

For instance — Crucible special magnetic alloys are used in instruments sensitive enough to pick up a fly's footstep; Crucible precision castings for jet engine parts are accurate within thousandths of an inch, and Crucible clock spring steels are specially made for split-second operation.

The range of Crucible special purpose steels is daily increasing to meet industry's ever-demanding needs. If you have a requirement that a special steel can fill . . . call on Crucible.

CRUCIBLE

first name in special purpose steels

52 years of *Fine* steelmaking

CRUCIBLE STEEL COMPANY OF AMERICA, GENERAL SALES OFFICES, OLIVER BUILDING, PITTSBURGH, PA.

MIDLAND WORKS, MIDLAND, PA. • SPAULDING WORKS, HARRISON, N.J. • PARK WORKS, PITTSBURGH, PA. • SPRING WORKS, PITTSBURGH, PA.
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The FIRST Flying Carpet

was "FLOATED" by an Old Caliph in Bagdad



He mentioned it frequently in his famous Tales of the "Thousand and One Nights." Since then "air space" has been put into use for many mechanical devices . . .

Not a floating carpet—but a powerful "work-horse" for conveyor systems is the

**FLOATING DRIVE with
AUTOMATIC CUT-OFF
and LOAD INDICATOR**



another FIRST by
JERVIS B. WEBB COMPANY

For years a standard on Webb Conveyor systems, the patented Floating Caterpillar Drive enables automatic limit switch cut-off in case of jam, cushions starting load, and has an easily calibrated load indicator.

The motivating power unit on both the Caterpillar and Sprocket type Webb drives floats on wheels against heavy springs. When a conveyor starts, the initial shock is taken by these springs.

If external forces jam the conveyor, the springs are compressed to a point where the moving frame actuates a limit switch on the fixed frame, stopping the drive instantaneously. As soon as the jam is eliminated, the conveyor may be started immediately by push button. There are no shear pin headaches. If a conveyor becomes overloaded, this fact is indicated at once as the compressor springs move an arrow indicator to a red danger area.



INDUSTRY



SERVICE SCHOOL teaches mechanics the A, B, C's of repair and maintenance of power lawn mowers. If you have to cut the grass, Reo Motors, Inc., says . . .

Let a Power Mower Do It

In the old days it was no trouble to get your lawn cut. You didn't even have to go outside. A boy with a smile would do it for 50¢.

All that has changed now. The whistling boy has vanished, like most other service help, into greener fields. If you want your lawn cut, you have to get your wife to do it—or do it yourself.

This is the reason behind the wave of popularity that has swept up the power lawn mower in postwar years. As a result, sales of all types of power mowers zoomed from \$5-million in 1941 to a staggering \$100-million by the end of 1950.

Most of this boost came from home-owned models, rather than institutional ones such as you see trimming estates or golf courses, parks, and cemeteries. It was a rare thing before the war for a home owner with a small lawn to own a power mower. But almost overnight the automatic grass-cutter jumped the hedge of the luxury estate and landed in the giant middle class. That market had been practically untouched by the industry, and is far from saturated right now.

• **Steady Rise**—Success stories of manufacturers in the fast-growing industry are tales not of overnight boom, but of steady climbing. A typical story is that of Reo Motors, Inc., of Lansing, Mich. Reo's president, Joseph S. Sherer, Jr., and the vice-president heading the power mower division, Samuel O. Briggs, are extremely fond of the power mower. The reason is that the power mower saw the company through some

of the worst years in the truck industry's history.

• **Comeback**—Reo, like all other truck manufacturers, had pretty rough going for two or three years right after the war. In 1950, however, the tide suddenly turned. Reo surprised its stockholders by doubling its 1949 sales: They jumped from \$23,242,000 in 1949 to \$57,353,000. Last year Reo did another double-take. The company's annual report for 1951 pegs net sales at \$112,872,057.

Reo gives a lot of credit for the quick comeback to its old standby, the truck—especially the highly praised, hush-hush M-34 Eager Beaver (Ordnance Dept. has classified all data on it), for which Reo now has a \$200-million military backlog.

But another big factor helped change the direction of the wind. Reo was selling reel-type power mowers like mad.

• **New Chapter**—Reo made its debut in the power mower field in 1946, just in the nick of time as far as the truck end of the business was concerned. Still, profits didn't show overnight. The idea that a power mower could fit the average-sized lawn, and pocketbook, was a fairly new and daring one in 1946. The industry turned out only 163,946 reel-type units that year; 9,150 of these came off Reo's assembly lines. (In the reel-type mower, the blades revolve around the axle as in hand mowers.)

But Reo mower sales forged ahead steadily until by 1950 the company had climbed to the top in a field of some 150 companies. Last year the

Meet His
Royal Nibs

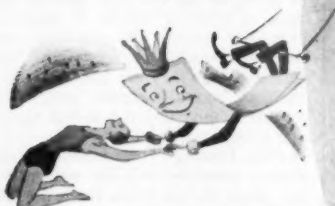
NIBROC® PAPER TOWELS



ABSORBENT! Nibroc paper towels make moisture disappear almost like magic. Because they dry drier—faster, they have become the world's largest selling paper towels for offices, factories, schools, stores, hotels and hospitals.



SOFT! Nibroc paper towels are delightfully soft and pleasant to use. They do not shed fuzz or lint, and because one towel wipes dry they are more economical to use. Customer and employee relations improve with Nibroc.



AND STRONG! Nibroc paper towels will not tear or come apart in the hands when wet. They really are tough, even though soft. For over 30 years Nibroc users have been assured of a dependable towel supply under any conditions. For more information write our Boston office, Address Dept. EN-3.



Nibroc Towels Make friends a Million Times a Day! They're so soft to the touch... so easy on your hands... so efficient in soaking up water. No wonder management finds Nibroc towels a sound investment in good will.

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SPEEDS up to 6 mph



**Low-Lift, Rider-Type
ELECTRIC TRUCK**



**A FAST, LATERAL MOVER—
for LONG HAULS or CRAMPED AREAS**

Now . . . no more slowdowns on long hauls, stock picking, rail loading or unloading with the **RAYMOND** Low-Lift Electric Truck for single or double-face pallets.

This new **RAYMOND** Truck performs in narrow aisles and cramped quarters originally intended for hand lift trucks. It has the added advantage of high speeds plus riding comfort. It moves loads swiftly, smoothly up to 5 mph . . . travels up to 6 mph empty.

It's so maneuverable too . . . operates in truck trailers, boxcars, elevators and crowded production areas.

● **SPEEDS UP HANDLING** Features fast starting and stopping—short length—magic maneuverability. Speeds up long hauls, stock picking, loading and unloading.

● **ELIMINATES HAZARDS** Designed especially for riding comfort and safety. Operator rides in safe standing position, protected by metal guard. Result: safer handling, less strain and fatigue.

● **FAR MORE MANEUVERABLE** Has 200° turning radius—right-angle picks up and spots unit loads in aisles only 5 ft. wide, narrower than its own length with load.

● **OPERATES IN CRAMPED AREAS** Operates with ease inside truck trailers, boxcars, elevators—also in narrow aisles, crowded production areas.

● **SIMPLE TO MAINTAIN** All working parts are quickly accessible—major working assemblies easily removed from main unit for swift, simple bench repair.



**SEND
TODAY**

RAYMOND Low-Lift Electric Truck, Model EL4F for single and double-face pallets. Capacity 4,000 lbs. Model EL4P for skid platforms.



**Electric Industrial Trucks
Hydraulic Elevating Equipment**

The RAYMOND CORPORATION

Formerly LYON-Raymond Corporation

5271 Madison St., Greene, N.Y.

Gentlemen: Please send me Bulletin 750 on your new **RAYMOND** Low-Lift Electric Truck.

Name..... Title

Company

Street

City..... State

**"... Talk of the future
brings only smiles from
Sherer . . ."**

INDUSTRY starts on p. 88

industry's sales of 1,163,838 units added up to a cool \$84,958,160. Reo's sizable bite: 153,006 units, for \$11,131,590.

Reo made the grade and then some, in spite of materials restrictions, which sheared mower production in half last year. The company got around this bend by substituting magnesium and cast iron for aluminum and steel. It managed to keep production at about 70%. This year the company expects to turn out at least as many units as it did last year.

● **Happy Talk**—Talk of the future brings only smiles from Sherer. Eventually, as he sees it, the small electric-driven mower, which cuts small lawns as a vacuum cleaner runs over a rug, will be standard equipment for the small-lawn owner—once manufacturers are able to tailor the price to fit the pocketbook.

The 18-in. electric mower Reo puts out costs \$96.25. Reo's other three models are gas-powered, use 18-in., 21-in., and 25-in. cutting reels. They sell for \$114.95, \$136.95, and \$231, respectively.

The reel-type mower has limitations, though. It won't pick up creeping grass or shear long grass. So Reo is looking to another type, the rotary mower, for another big future market. Rotaries cut anything and pick up the kind of tough creeping grass found in the South and Southwest. Actually, rotaries have been around since the twenties, but they have been cumbersome, crude, costly affairs. For that reason manufacturers are starting to redesign them.

The replacement market looks just as good to Sherer. The average lifespan of a power mower is about six years—not because the machines wear out, but because they rust out. The reason is that they are usually exposed to year 'round weather, since most owners simply prop the mower against the garage wall for the winter.

● **Firm Footing**—The promise of great things, however, isn't the only reason the power mower heads Reo's diversification list. For the power mower was an old love with Sherer when he joined Reo in 1943 as vice-president and general manager. Before that, he had been an executive with Ideal Power Lawn Mower Co. Ideal was in somewhat less than ideal circumstances when Sherer appeared on the scene in 1938. But in three years Sherer pulled the company out of the quicksand onto

**they're
custom-built
to fit the job!**



Work boats, pleasure craft



Drilling rigs, centrifugal pumps, generator sets



Earthmovers, logging yarders and loaders



Buses and highway trucks



Off-highway trucks, crawler tractors



Shovels, cranes, industrial locomotives and switchers

Lightweight, high-speed Diesels (50-550 hp) for these and many other uses

Cummins® Diesels do so many jobs so much better

**they're
BUILT
NOT
ONCE
BUT
TWICE**



Wherever performance requirements are really rough, you'll find lightweight, high-speed Cummins Diesels assigned the hardest jobs. Every Cummins Diesel is built **TWICE**—assembled, run-in tested, disassembled and inspected...then, re-assembled and retested. This *extra care* combines with Cummins' unique fuel system and efficient parts and service organization to minimize "down time" ...give users a maximum return on their diesel investment. See your Cummins dealer.



**Diesel power by
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CUMMINS ENGINE COMPANY, INC., COLUMBUS, INDIANA
Export: Cummins Diesel Export Corporation • Columbus, Indiana, U.S.A. • Cable: Cumdiex



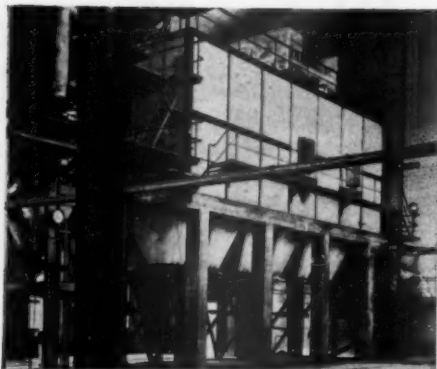
A Buell industrial 'dust' man can show you how valuable dust recovery actually pays for itself in profits and plant efficiency



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For more than 18 years we have been doing just this for all American industry. Every Buell installation is a custom-designed system, engineered to hold stack dust discharge down to the practical limits which assure new profits, improved product and/or process, better plant-community relations, higher levels of employee morale.

For full information about Buell's **3 basic systems** of dust collection, and how one can be applied to the solution of your stack dust problems, write today. Ask for the new informative bulletin titled, "The Collection and Recovery of Industrial Dusts." Do it now. Buell Engineering Co., Dept. 30-C, 70 Pine Street, New York 5, N. Y.

"... one of the biggest jobs was to educate prospective buyers ..."

INDUSTRY starts on p. 88

solid ground. A graduate of the Massachusetts Institute of Technology, Sherer had already picked up his automotive manufacturing experience at Oakland Motor Car Co. and Gemmer Mfg. Co. before he came to Ideal.

When Sherer moved over to Reo, he was followed shortly after by Briggs, who had also helped doctor Ideal's ills.

• Ready and Waiting—All during the war, Sherer and Briggs kept their mower ideas simmering. As soon as the war was over, they brought them to a boil. Reo was ready to move into power mower production fast.

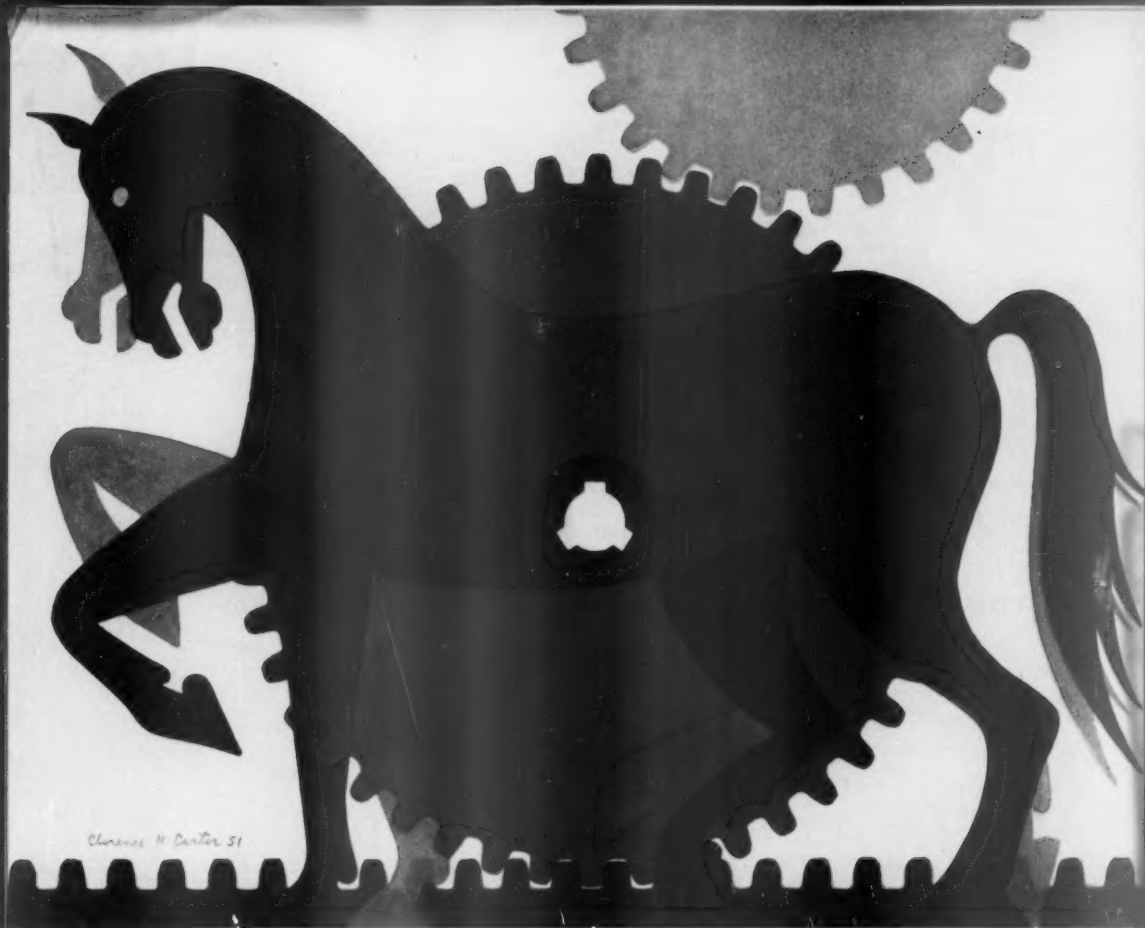
Sherer and Briggs realized that one of the biggest jobs they had to do was educate prospective buyers—and sellers. Up to that time most people considered a power mower a class item that only the wealthy could afford—or needed. Reo set out to convince the average home owner that the mower belonged not just on estates or in parks, but right in his own garage—and that he could afford it.

• Fresh Start—To do this, Reo began to tap advertising fields and methods that the industry had practically ignored before. It began to run expensive four-color ads aimed at families with incomes of \$3,600 or more. Reo fired its first shot at the Christmas market, running the first ads during the winter off-season in 1946-1947. The trade raised its eyebrows at this. But the shot bagged such good results that Reo has hammered away with Christmas ads every year since then.

Another daring feature of Reo's ads was that they pushed group buying as well as individual buying, showing neighborhood friends the advantages of sharing a power mower.

• Double-Barreled—Once Reo got its consumer advertising program well in hand, the company turned its attention to the retailing end of the business. Up to now Reo has shied away from large chain retailers, preferring to sell directly to 150 wholesalers. Management feels that these wholesalers, whose 4,500 salesmen contact about 12,000 independent hardware and implement dealers, are likely to put more sales effort into one make than would a large retail outlet that handles several makes.

• Same Old Story—One of Reo's key problems is getting dealers to set up power mower service centers. Dealers have been reluctant to set up such shops, even though the mower is generally their largest selling, highest-priced



Machinery... and *The National City Bank of New York*

Until recently, most of the machines man invented multiplied the horsepower at his command. By increasing his productivity at a fabulous rate, these machines enabled him to enjoy more and more of the comforts of life, while working fewer and fewer hours.

Now there are even more promising machines humming and clicking in laboratories and "factories." They are giant electronic calculators that may increase man's mental output as much as the work-doing machines raised his physical production. These mechanical brains unravel in a short time problems that would take a human brain a lifetime to solve, and thus open up completely new fields for science to explore.

The manufacture of machinery is a most important element in our economy. In 1951, more than 25 billion dollars' worth of new machinery was turned out here, and the 12,000 companies that produced it

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Like many other businessmen, machinery manufacturers find distinct advantages to banking with The National City Bank of New York. It offers every facility, unparalleled resources, and 140 years of banking experience. Moreover, the Bank's complete services are quickly available anywhere in the United States or overseas. The Bank has 67 Branches in Greater New York, and correspondent banks in every state. Overseas there are 56 fully staffed National City Branches, and correspondents in every commercially important world city.

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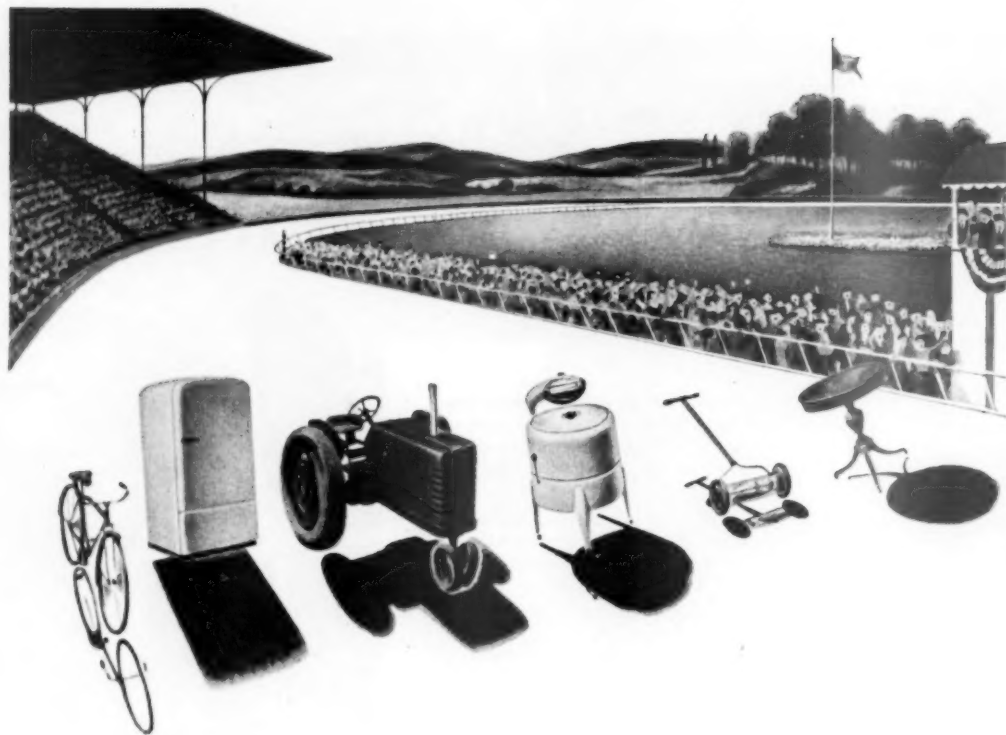
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BUY DEFENSE BONDS



Tight Finish

A finish compounded with Epon® resin sticks so tight that it's virtually part of the wood or metal it protects. This remarkable resin is made from epichlorohydrin, a petroleum chemical developed in recent years by Shell scientists.

Combining unusual adhesion and toughness, Epon resin finishes stand up under the rough duty given farm machines, tools and bicycles. Epon resin baked enamel finishes on household appliances last longer and cost less. An Epon resin varnish is so tough you can dent the wood

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Epon resin printing inks, a late development, make possible printed patterns on cotton or rayon as permanent as the cloth.

Production of Epon resins as a basic raw material for the coatings industry is but one example of Shell Chemical's partnership with industry and agriculture. Application of petroleum chemistry to your needs is our constant purpose.

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"... Reo has plenty of other cushions to fall on when the defense program falls away ..."

INDUSTRY starts on p. 88

single item. Briggs estimates that the industry needs about seven times as many service centers as it has.

"This business pretty much parallels early auto history," Briggs explains. "Many shops, large and small, were building cars as fast as possible, but nobody was providing facilities for servicing the cars. That's what has happened in the power mower industry."

To fill that gap, Reo has organized a service school, which has already turned out 300 full-fledged power mower service men. It trains mechanics to service not only Reo models, but other companies' mowers as well.

• **Mobile Shop**—To encourage dealers to provide maintenance facilities, Reo keeps a mobile power service center on the road. The converted 40-passenger Reo transit coach carries all the equipment a dealer needs to open a service shop.

• **No Gaps**—In spite of Sherer's and Briggs' fondness for the power mower, the company isn't sinking all its teeth into mowers by any means. Reo has plenty of other cushions to fall on when the defense program falls away. They include: the Eager Beaver truck (for civilian use), a new liquid petroleum gas truck (BW-Feb. 9 '52, p. 28), a proposed toy line, and the Gold Comet Engine.

When materials are available for toys, Reo plans to go into production in a big way, by the same mass production methods it uses for power mowers. It has already purchased the assets of Velo King, Inc., a New York velocipede manufacturer, and hopes to build up a brand name of its own for tri-cycles, express wagons, and other toys.

In the vehicle field, Reo is toying with the idea of going more heavily into the 6 x 6 truck field for the civilian market. If it does, it will probably have the field all to itself. Right now the commercial market for off-the-road 2½-ton trucks is practically wide open, since other civilian trucks of this size have to be adapted to six-wheel drive.

This kind of diversification has kept Reo on an even keel. And there's little chance of Reo's getting into another jam like that of 1948-1949. Many other Michigan plants have had to resort to lay-offs, but Reo has maintained its labor force and steadily increased it. In 1946 employment rolls stood at a little over 2,400. They jumped to 3,148 by 1951. This year they will run around 3,600.

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Teeth of SPIN-LOCK Screw touch bearing surface before final tightening.

Final tightening embeds teeth in surface, assuring positive locking.

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REGIONS



GREENSBORO citizens couldn't do their shopping because traffic was too congested in the business section. So the city opened 10

Small Cities Are Turning Traffic Jams



WHERE YOU PARK and what you pay depend on how long you want to park. A half-hour stop across the street costs 5¢; a few blocks away, it's 25¢ for eight hours.



METER TAKE for 1951 hit \$85,000. It all went back into the parking-lot kitty.



off-street parking lots within walking distance.

Into Profits

The sudden influx of workers into small cities during World War II added a lot of problems to the communities. And the end of the shooting didn't end all the problems. A lot of small towns were left nursing hangovers. One of the biggest of these was traffic.

Greensboro, N. C., was one of the small cities to figure out, early in the game, that congested traffic and inadequate parking would hurt business. At the end of the war, traffic in Greensboro was so slow, and parking so difficult that business at downtown stores began to drop off. City fathers began to worry that downtown real estate values would drop, also.

• **The Remedy**—By this summer, as a result of its several years' planning program, Greensboro will have 10 large off-street parking lots in operation—

"Mechanizing
with
GERLINGER
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handling costs
50%"

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ABOVE PICTURE shows how City Junk formerly loaded shop turnings with manual labor, resulting in much loss by scattering.

ABOVE, RIGHT: Scrap is now loaded in metal bins of 12-ton capacity. Two Gerlinger Carriers transport filled bins over city streets to scrap concentration yard—at great savings in time and labor.



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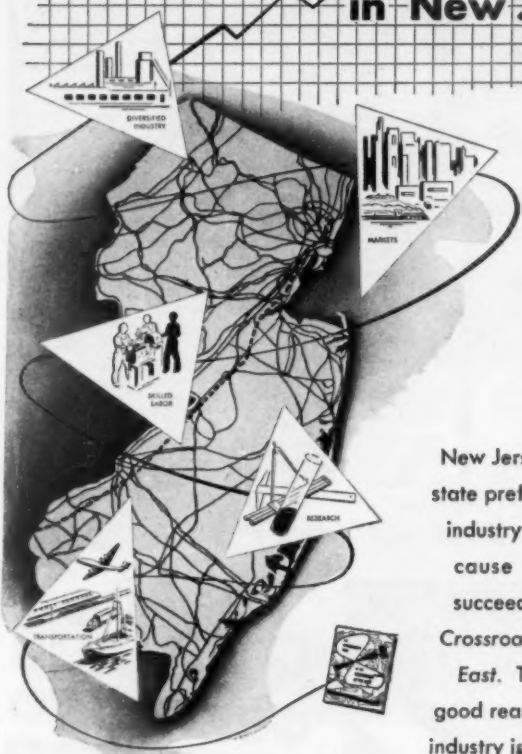
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NEWARK, NEW JERSEY

housing more than 500 cars. Except for one lot that the city leases, all are city-owned and all were paid for with parking meter revenues. The total value of the real estate involved is \$300,000.

The city didn't accomplish this in one fell swoop. Its first step was to install a one-way traffic plan to speed the flow of traffic. Then it set up almost 1,000 parking meters in the downtown area. City Manager James R. Townsend next decided to return the streets to their primary function of moving traffic, not serving as "dead storage" space. So far, so good, but the next problem was what to use for parking space.

Townsend had the answer to that one, too. With the approval of the city council, he set about buying good-sized lots close to the downtown shopping area—within two or three blocks' walking distance. He got the funds for the purchases from parking meters.

Once the lots were graded and paved, meters were installed. The meter charge varied according to the lot's location in relation to the shopping center. Some were metered for all-day parking, 25¢ for eight hours, 5¢ for two hours. Others, closer in, were 5¢ an hour, or 5¢ for a half-hour to insure faster turnover. Signs were posted all over the city to show the location of the lots.

• **Into the Kitty**—Right now, Townsend is plowing back every cent of parking meter revenue (\$85,000 in 1951) into buying more off-street parking lots. He hopes eventually to have enough so that he can move all parking off downtown streets.

Downtown businessmen have cottoned to the idea, note that customers are more likely to shop downtown when they can park their cars nearby. Some merchants have built their own off-street parking facilities—all with the blessing of the city, which is anxious to encourage private enterprise to provide such facilities. Sears, Roebuck has a lot that holds 400 cars, and two other large department stores have off-street parking space.

• **If You Can't Buy, Lease**—If Townsend can't buy the lot he wants, he leases it or makes some similar arrangement. Recently he wanted a large piece of property one block from the center of the shopping area for a quick-turnover parking lot. The city couldn't pay the asking price of \$400,000, so Townsend proposed to lease it from the owner.

Under the proposal, the owner would pay for the cost of grading and paving, and would pay the city \$36 per meter a year. In turn, the city would install the meters, maintain and police them. Townsend estimated that the \$36 kickback would cover the amortization of the meters and the maintenance. The owner would keep



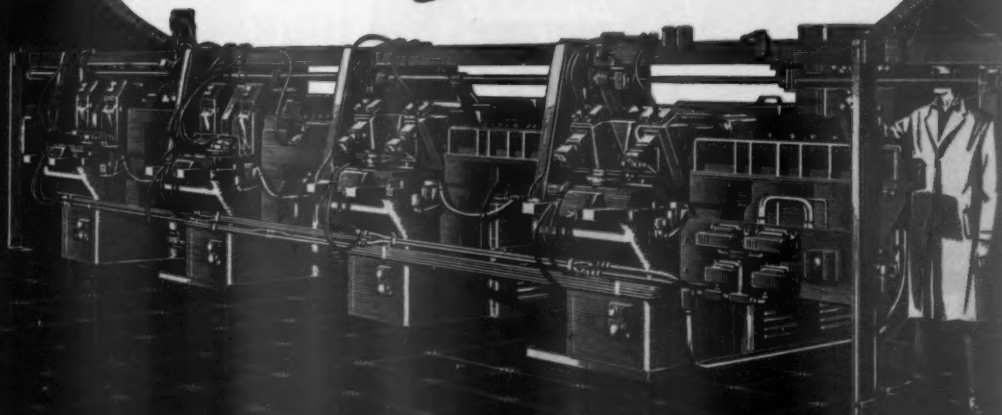
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progressive manufacturing?*

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EXPANDED
METAL!



WHEELING CORRUGATING COMPANY

WHEELING, WEST VIRGINIA

Atlanta Boston Buffalo Chicago Columbus Detroit Kansas City
Louisville Minneapolis New Orleans New York Philadelphia Richmond St. Louis

all the money taken in by the meters in the lot. On this particular deal, the owner will make between \$10,000 and \$15,000 a year profit.

Under such an arrangement, Townsend points out, the city is able to acquire expensive off-street parking facilities for a song; and both the city and the property owner benefit.

• **Broad Pattern**—This trend to buy where you can park is showing up all over the country. And a growing number of small cities have decided they had better do something about it. In Quincy, Mass., businessmen began to be alarmed because more and more customers were patronizing suburban stores, where they could park—free—in the very shadow of the store.

To combat this exodus, the city enlarged its parking space, and is going ahead with plans to double its off-street parking facilities. Unlike its suburban competition, the city won't offer free parking. But past experience shows that a customer won't balk at paying a few cents, if it means he can park near his place of business. So Quincy parking space is fully equipped with parking meters.

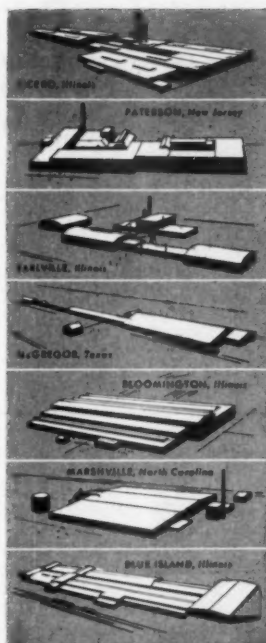
The South Finds More Manganese and Mica

Manganese and mica are two minerals that come in harassingly small quantities in the U. S. They don't get much publicity, but without them a good bit of defense production would grind to a halt. A lot of industrialists were pleasantly surprised, consequently, when Secretary of the Interior Oscar L. Chapman announced two weeks ago that new deposits of both minerals had been certified in Arkansas and North Carolina.

The manganese deposit was on the property of Westmoreland Manganese Corp., near Batesville, Ark. The mica was at the Reid-Mary mine of Pitt Mica Corp., near Franklin, N. C. Both deposits are expected to cough up substantial quantities of ore.

• **Exploring Agency**—These discoveries were the first to be formally certified by Defense Minerals Exploration Administration, a new government agency whose mission is to find U. S. mineral deposits. "Certification" by DMEA means that (1) the discovery is worthwhile, and (2) it's economically feasible to get the minerals out of the ground in that particular location.

• **A Find**—Manganese is used largely in steel production, mica for electrical insulation and—because of its optical qualities—for delicate measuring and sighting instruments. The U. S. is especially short of manganese; big supplier used to be Russia.



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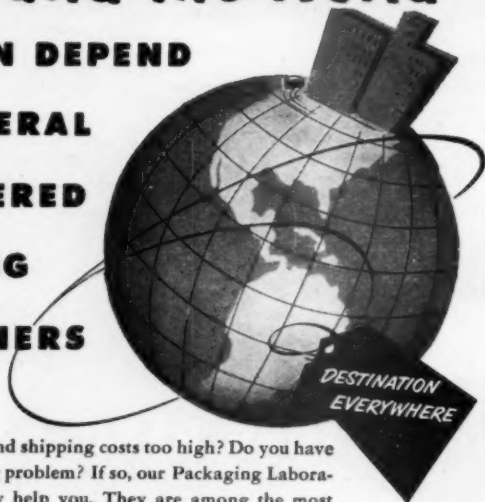
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Too Wet, Too Dry

That's the way it goes in the Rio Grande valley. First comes a flood, then a fight over water rights.

Farmers in central New Mexico are taking their perennial water problem a little harder than usual this spring. One of the deepest snowpacks on record awaits the April thaw on the mountains at the head of the Rio Grande valley, up on the Colorado border. Only the greatest good luck can save the state from a vicious flood.

At the same time, the middle valley around Albuquerque faces a waterless summer. Its irrigation account has been overdrawn through 10 dry years, and farmers in lower New Mexico and in Texas are hot after the U.S. Supreme Court to prohibit all irrigation of the 118,000-acre middle valley until the deficiency is made up.

• **The Flood Danger**—The farmers hardly know which peril to worry about more. The flood, of course, will come first. And if the mountain snows should melt all at once, or the thaw is accompanied by heavy rains, it may have the more violent effect.

Now the U.S. Weather Bureau is predicting that flood stages will be exceeded this spring. Fearing the worst, Albuquerque is raising a local fund of \$200,000 to fight floods, and the state is asking for federal funds. If Albuquerque goes under water, not only will its 150,000 residents be inconvenienced, but also three key Atomic Energy Commission plants: Sandia Base, Kirtland Air Force Base, both at Albuquerque, and Los Alamos, 60 mi. to the north. These bases would have to depend on airlift.

The chief flood protection is El Vado Reservoir, which is situated at the head of the valley. This reservoir is now empty, and it's scheduled to be empty again after it has served its flood control purpose.

• **Water Fight**—That's because of the fight by downstream irrigation users to bar the middle valley from drawing water this summer at the expense of the lower valley. The middle valley now owes 320,000 acre ft. of water, under the three-state Rio Grande Compact.

Short of barring irrigation entirely in the middle valley this summer, there are only two ways the debt might be paid: (1) by a series of extra wet years or (2) by such a heavy spring run-off that the downstream Elephant Butte Reservoir gets more water than it can handle—the overflow would count against the deficiency.



WONDER BAR

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You're looking at a major innovation in modern railroading—one of the basic cross bars of the Evans DF Loader which can be handled by one man. This advanced equipment, installed in standard box cars, eliminates costly blocking and strapping, yet locks in lading so firmly that it reduces damage to the vanishing point.

Results? Shippers save millions by eliminating old-fashioned dunnage and the labor needed to install it. Railroads save more millions in damage payments, and in reduced damage to rolling stock. Further, cars equipped with DF Loaders earn more revenue; they are loaded heavier and turned around faster.

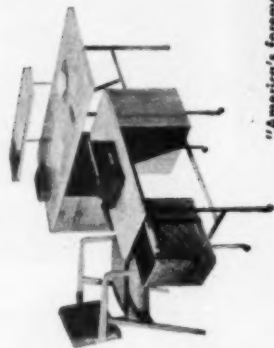
The DF Loader—the Damage Free, Dunnage Free Loader—*secures* loads against shifting . . . *supports* loads to prevent crushing . . . *separates* loads into solid sections. The latest achievement of Evans loading engineering, it is available at no extra cost in cars supplied by 24 Class I railroads. To learn how this modern equipment can earn extra profits for you, consult Evans Products Company, Dept. B-23, General Offices: Plymouth, Mich. Plants: Plymouth, Mich., Coos Bay, Ore., Vancouver, B.C.

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IT COMES IN HERE when a flooded mine is tapped by a drill. And . . .

Leadville Mines Revived by

They couldn't pump water economically out of Leadville's flooded mines, but they could and did pull the plug to let the water run downhill. The drain is a 2-mi. tunnel from a mine area 500 ft. below ground to the still lower Arkansas River valley (BW—Dec. 17 '49, p22).

The tunnel has just been finished after nine years of sporadic digging. Cost adds up to \$2-million, but the project reopens 200 mi. of underground workings that once produced \$460-million worth of gold, silver, lead, zinc, and copper. The U.S. Bureau of Mines figures there may be as much ore still below ground as has been already mined.

• **Death by Drowning**—The Colorado mining town's boom died early in this century, not because the ores played out but because it became increasingly costly to pump the mines dry as they reached out in the rich earth. Lead-

ville lies among 14,000-ft. Rocky Mountain peaks. These peaks, snow covered most of the year, drain naturally into the Leadville basin at a rate of some 6,000 gal. a minute.

When depressions hit the mining industry, and the mine pumps were shut off, it was the end for Leadville. From its heyday of 30,000 population, the town shrank back to 5,000. The price of ores just couldn't go high enough ever to warrant tackling the pumping job from scratch.

• **Resuscitation**—World War II's need for more and more metals revived interest in the 3-million tons of ore underground and underwater. Congress put up \$14-million for the drainage tunnel project.

Stiers Bros. Construction Co. of St. Louis drew the contract for boring the tunnel, slanting upward under the drowned mines. Drillers ran into trouble with soft, caving ground. When



IT GOES OUT HERE on way to river.

New Tunnel

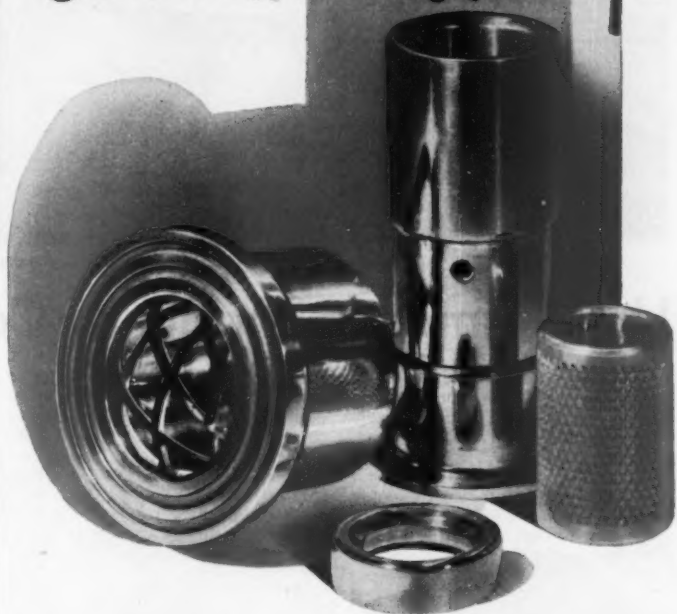
the appropriation ran out, only 6,600 ft. had been tunneled, with a mile yet to go.

Bureau of Mines crews explored the old shafts, gathered evidence of the wealth of ore within reach, and persuaded Congress in 1949 to appropriate another \$500,000. Utah Construction Co. of Salt Lake City then finished the job.

• **Expandable**—The completed tunnel drains two of the four sub-basins in the Leadville area. It can be expanded later by lateral tunnels if the expense seems justified. The Bureau of Mines estimates that the main tunnel has already drained 6.8-billion gal. of the 11-billion gal. of water above the tunnel level.

The government will recover some of its tunnel costs. Mining companies that benefit are to pay a royalty on each ton of ore made accessible by the project.

Bunting Controlled Quality..



To produce many thousands of cast bronze bearings day after day, to the uniformly high quality synonymous with the name Bunting requires precise foundry control. This control starts with the raw materials necessary for production such as molding and core materials, core binders, fixed carbon fuel, pre-alloyed metal in ingot form purchased to Bunting's own rigid specifications, and virgin metals used for ladle additions to control metal composition. Then, too, melting and casting procedures are carefully controlled.

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ROTTING BREAKER and scarred hillsides are typical of Pennsylvania's four distressed hard-coal counties. It is still . . .

Hard Times in the Hard Coal County

Economic depression doesn't hit an area all at once, like a heart attack. Rather, it closes in slowly, like a creeping paralysis. Once it is far advanced, the cure is hard, and infinitely complicated.

• **One Industry**—In the four counties of Pennsylvania's anthracite belt, depression is all that a lot of people can remember. The decline of the mines—pillar of the one-industry area—has left them with dwindling population and massive unemployment. Today, with the rest of the country in the midst of a defense boom, the anthracite area enjoys the unhappy distinction of being one of the few areas in the U.S. that is in the grip of genuine depression.

The counties, with their chief cities, are: Lackawanna (Scranton), Luzerne (Wilkes-Barre and Hazelton), Schuylkill (Shenandoah), and Carbon (Mauch Chunk). Last year the U.S. Dept. of Labor rated the Scranton, Hazelton, and Wilkes-Barre regions among the 15 spots in the nation where workers greatly outnumber jobs.

• **Competition**—The great days of anthracite reached their peak in 1917 when some 156,000 miners produced over 100-million tons of hard coal. The decline that set in after that has progressed inexorably until 1951 found perhaps 75,000 miners producing 46-million tons.

Anthracite's main use is for home

heating. Oversimplified, the causes of its decline are (1) increased cost of producing the coal, with labor's price rising and the quality of the seams shrinking; and (2) progress of other and handier fuels, such as oil and natural gas.

• **Slow Decline**—Statistics tell the story of how the things that happened to anthracite reacted on the four counties and their people.

At first the reaction was delayed. Employment in the mines began to fall off after 1917, but the population of the counties continued to rise until 1930. Partly, that was due to a big excess of births over deaths, partly to the advent of more European miners, partly to the reluctance of the miners to move on, despite the lack of jobs.

In 1930 about 212,000 men were working in the coal mines and the quarries of the two counties. (Official statistics do not separate miners from quarrymen; but at a rough guess, the miners account for about three-quarters of the total.) By 1940 the combined figure had dived to 118,000. Since then the decline has slowed; in 1950 there were 95,000.

The loss of upwards of 100,000 jobs is reflected in what happened to the total population figures. In 1940 the four counties had a population of roughly 1,150,000; by 1950 this had shrunk to 1,015,000. The actual out-migration was larger than these fig-

ures show, for births outstripped deaths. And the statistical dopesheet says present trends will have the total down to 955,000 by 1960, if they aren't checked.

• **Diversity**—Other figures cast a light on another aspect of the scene—one in which a lot of people see the eventual salvation of the four counties. That's the shift away from a one-industry economy. In 1930 almost three times as many people earned their living in the mines and quarries as in all other industries put together. Twenty years later employment in the other industries was 130,000, nearly double the 1930 figure—and 35,000 greater than the mine and quarry total.

The trend toward diversification came as no surprise to local businessmen. It was in 1914, before the anthracite decline began, that Scranton made its first organized effort to bring in new industries. Efforts in the same direction have been continuing ever since. But they haven't been enough to stave off the region's troubles. Almost doubling the other-industry jobs in 20 years still leaves the area with only 230,000 jobs all told. In 1930 the figure was 284,000. Moreover, the current figures show female employment almost doubled in 20 years. So the loss of male jobs is even larger than the totals show.

Also, there is the question of whether the four counties can hang onto the

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WRITE
FOR
CATALOG

"... The catch is that textiles want cheap labor ..."

COAL starts on p. 108

nonmining industries that have built up there.

The biggest industry on the list—outside of mining, of course—is textiles. In 1950 value of textile production was around \$242-million, pushing the \$326-million showing of mines and quarries combined, and a mile ahead of anything else. The catch is that textiles want cheap labor. And today labor in the counties is not especially cheap. That leaves the question: Will the mills stay on?

• **First Move**—This worry puts extra steam into the various organizations that are trying to attract diversified industry to the anthracite area.

The Scranton Industrial Development Co., now 38 years old, began by concentrating on providing capital for local industries that wanted to expand. Despite its efforts, things were getting grim in 1946, when SIDCO created a new group, the Scranton-Lackawanna Industrial Building Co.

SLIBCO promptly raised, through small local contributions, some \$1,200,000. This was used to buy a large aircraft plant that had been largely idle since the war. Later SLIBCO sold \$1,313,000 in bonds, the proceeds to be used for building or buying plant facilities.

All the properties secured are offered to outside industries on attractive terms, for sale if possible, otherwise on lease.

In 1950 another promotional group was formed, Lackawanna Industrial Fund Enterprise. LIFE raised \$1,300,000. For a starter, it spent \$450,000 to build a 90,000-sq. ft. plant, which has been leased to Poloron Products, Inc., of New Rochelle, N. Y. Since then, it has brought in Dearborn Glass Co. of Chicago; W. L. Maxson Corp., New York City; Daystrom, Inc., Elizabeth, N. J. Maxson alone, with a second plant to be built soon, is expected to create 1,500 jobs.

• **Payroll**—Over-all, SLIBCO and LIFE claim to have built 16 plants with a total appraised value of close to \$10-million, and floor space of over 2-million sq. ft. Jobs for 5,000 have been created, with an annual payroll of nearly \$18-million. At the same time, other companies—acting on their own, but encouraged by the promoters—have built 21 other plants. And 55 existing establishments have been expanded.

Hazleton, 40 mi. away, got the Scranton idea in 1946. Its Chamber of Commerce asked for \$500,000—and got \$650,000—to lure in Electric

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New west coast plant of Davidson Baking Company with unobstructed floor space of 106 x 282 feet. Roof is supported by Glulam arches of Timber Structures, Inc.

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• The Twin Coach Company, Incorporated of Kent, Ohio, is the world's largest builder of city buses powered by propane gas. This company supplies buses to transit companies throughout the world. Pictured above is one of their latest models built for the Chicago Transit Authority. The company is currently celebrating its 25th Anniversary. Management changed over to cotton towels to eliminate fire hazard . . . tidier washrooms were the end result at lower cost to the company. Twin Coach employees are happier, too, with the greater comfort of soft, absorbent cotton towels.

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Koppers Polystyrene 81 proved the ideal choice for this new cabinet for several reasons. It offers practical, time-saving advantages and maximum convenience in use. The dividers (also made of Koppers Polystyrene) are easily moved to accommodate changing volumes of stock, and are molded of ivory-colored Polystyrene to make identifying lettering extremely readable and provide quick identification. The handsome mahogany color of the cabinet will always be fresh and new-looking.

Of prime importance is the fact that this new cabinet represents a substantial saving in manufacture and use over a previous metal model which it replaces.

Koppers Polystyrene 81 is a lubricated plastic, well suited for precision molding of this type. Its ease of flow assures that it will fill the mold, giving sharp definition to divider slots and corners, and permitting the molding of thin wall sections. Its improved physical properties plus greater dimensional stability provide a strong, rigid, good-looking cabinet and drawer that fit together perfectly.

Write for further information about the adaptability of Koppers Polystyrene to your housing or packaging problem. Our technicians are anxious to work with you . . . to design new packages or products to be made of Koppers Polystyrene, and to help you obtain the best possible results in using this versatile plastic.



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**"... The real profit would
be in the industries that use
the coal ..."**

COAL starts on p. 108

Autolite Co. of Dayton, Ohio. When the plant is running full blast, it adds 2,000 jobs.

• **Too Little**—All this sounds like a lot of bustling activity. But actually, widespread apathy has prevented a really coordinated, arewide attack on the problem. Localized gains are out-balanced by general loss. Streets of the cities are pitted with holes that there is no money to repair. The long rows of miners' houses stand paintless and unrepaired. Close to two-thirds of them were built before 1920, nearly a third before 1900.

Worst of all is the continuing out-migration. Mostly, it hits the young men who come to wage-earning age without a hope of finding a job. A lot of them make a career of the armed services. Still more just leave—and their departure deprives the four counties of what should be the vital sap in the old tree.

• **Program**—The Planning Board of Pennsylvania's Dept. of Commerce thinks it knows the cure—but it's a cure that will have to be worked by the region itself.

The heart of the program is bringing in more industries, preferably ones that can utilize anthracite coal. That doesn't mean that greater use of coal would cure the unemployment. On the contrary, mechanization would probably cancel out the gains. The real profit would be in the jobs in the industries that use the coal. Among suggested developments are foundries, power generation, natural gas generation, and chemicals.

The board also thinks a tourist trade could be developed for the mine-scarred hillsides have not wholly lost their rugged beauty. And the area once had magnificent forests. These were long since stripped by rapacious lumbering. Modern methods have already started some replanting; long-term, a flourishing industry could be revived.

Tying all its ideas together, the board urges that every effort be made to get the fast-departing younger people to start businesses of their own. A revolving fund is suggested, to finance new enterprises that are locally owned.

Federal mobilizers have already recognized the area as one of distress, eligible for defense contracts on a non-competitive basis. That partly clears the track for the local people, but the really big job is still up to them.

Everything to accelerate answers - and reduce costs!

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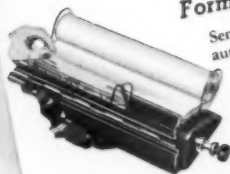
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MUNITIONS

A First in Munitions

American subsidiary of Swiss arms maker is first U. S. private, self-supporting munitions plant.

America's first munitions manufacturing project that is wholly financed and controlled by private interests got off the ground last week. Oerlikon Tool & Arms Co., of Zurich, Switzerland, started construction of its American subsidiary, Oerlikon Tool & Arms Corp. of America at Swananoona, N. C., 10 miles east of Asheville in the mountains of western North Carolina (BW—Nov. 3 '51, p. 146).

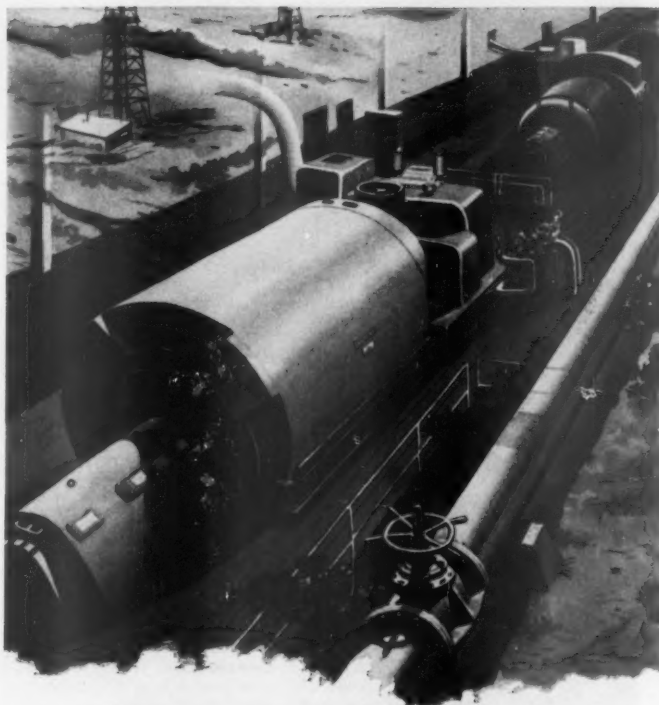
• **First Phase**—Lt. Gen. Kenneth B. Wolfe (ret.), former USAF Deputy Chief of Staff for Materiel and president of Oerlikon-America, announced that foundations are in for two buildings in the \$34-million construction program. First to go up are the 50,000-sq. ft. production building and a rocket and gun-firing range. These projects should be completed in less than two months. That will leave just one more project in the company's first phase of construction: a 14-building unit to house powder manufacturing. Grading already has started for seven prefabricated buildings and for seven permanent reinforced concrete buildings. These will be ready about the first of February, 1953. Then Oerlikon will plan additional building.

The North Carolina site is in a quiet valley between two mountain ranges in the resort area of the state. It was chosen because mountain coves that lie in the 13,000-acre tract are ideal for rocket and gun-firing ranges. The main offices of the company are at the plant site, but Gen. Wolfe says that the company will maintain an office in Washington, too.

• **A Slow Break**—During the early stages, Oerlikon-America will stick close to its parent company, both in operations and financing. But as the company gets on its feet, it will draw in American capital and management and gradually move away from the Swiss company.

Right now, Oerlikon-America is completely financed by the parent company. Once it gets going, it will invite its subcontractors to buy stock. So far the company does not plan any public sale of stock.

• **Raring to Go**—If there isn't any hitch in plans, Oerlikon-America expects to begin testing on its rocket and



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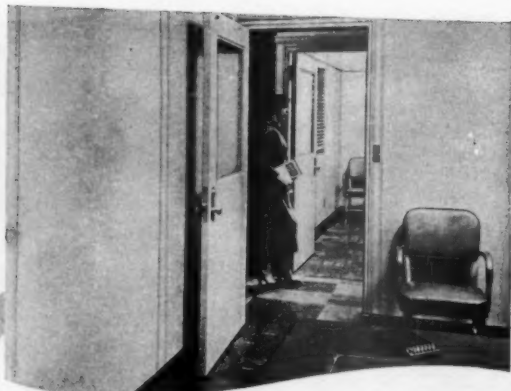
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gun-firing range, and handling assembly-type contracts in the production building, by midsummer. The contracts will be mainly prime and sub-contracts on military work for the Air Force.

When the powder unit is completed, Oerlikon-America will take over from the parent company a contract to produce Oerlikon 8-cm. rockets. It hopes to take over other contracts from its Swiss parent, and begin some on its own.

Then Oerlikon-America expects to employ between 4,000 and 5,000 workers.

Gen. Wolfe will begin operating with 50 to 75 trained workers from the parent company. As fast as these workers can train American replacements, they will return to Switzerland. The company expects the switchover to be completed by the end of the first year.

• **Here to Stay**—Once munitions manufacture has been stabilized, Oerlikon-America will start producing non-military items along the lines of those the parent company makes. These will include precision jig bores, gear generating machines, and the Oerlikon precision lathes. If and when demand for munitions subsides, the company will simply convert to machine tool production.

"In other words," said Gen. Wolfe, "we are in business here to stay. We don't plan to fold up when the military emergency is over."



Tank Armor X-Rayed

The penetrating eye of this 24-million-volt betatron shows up tiny flaws in steel castings 7 in. to 9 in. thick. The Army is using the X-ray machine to inspect tank armor at General Steel Castings plant in Granite City, Ill.



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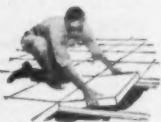
A single layer of Kaylo material, in the form of heat insulation, provides heat savings over a wide temperature range—up to 1200°F.—temperatures which used to require two thicknesses of different materials.

Kaylo calcium silicate is an inorganic and incombustible chemical compound (*not glass*). It is insoluble in water, has exceptional stability, strength and light weight. These advantages indicate why Kaylo calcium silicate is replacing materials long used in the insulating field.

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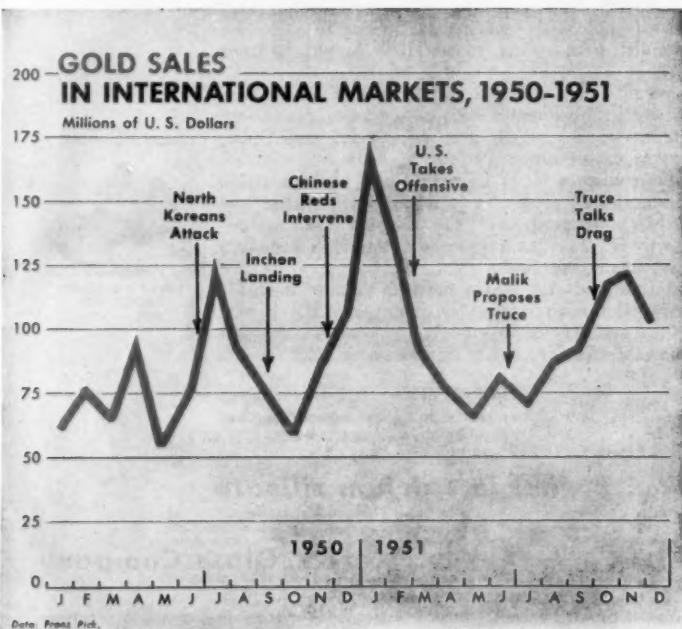
BOOKS

Handy Guide to World Black Markets in

THE U.S. DOLLAR IN THE WORLD'S BLACK MARKETS

	Official Rate (yearend 1951)	Black Market Rate		Official Rate (yearend 1951)	Black Market Rate
POUND CURRENCIES (units per U.S. \$)			IRON CURTAIN (units per U.S. \$)		
Pound Sterling	.357	.418	Eastern Mark	none	21.00
Australian Pound	.446	.532	Hungarian Forint	11.74	41.50
Egyptian Pound	.348	.450	Czech Koruna	50.00	650.00
Irish Pound	.357	.412	Rumanian Leu	150.00	515.00
Israeli Pound	.357	2.22	Bulgarian Lewa	285.00	1,150.00
WESTERN EUROPE (units per U.S. \$)			Russian Ruble	4.00	25.00
Belgian Franc	50.00	54.00	Polish Zloty	4.00	25.50
Portuguese Escudo	28.75	29.10	ASIA (units per U.S. \$)		
French Franc	349.50	426.00	Red Chinese Dollar	22,890	38,500.00
Dutch Guilder	3.80	4.23	Hongkong Dollar	5.71	6.70
Italian Lira	625.00	690.00	Indian Rupee	4.76	3.90
Spanish Peseta	11.00	52.00	Taiwan Dollar	15.55	26.75
CENTRAL AND SOUTHERN EUROPE (units per U.S. \$)			Pakistan Rupee	3.31	3.30
Swiss Franc	4.37	4.36	Philippine Peso	2.34	2.91
Austrian Schilling	14.40	33.00	Iranian Rial	32.25	66.50
Western Mark	4.20	5.13	Indonesian Rupiah	7.56	17.00
Yugoslav Dinar	50.00	750.00	Straits Dollar	3.06	3.65
Greek Drachma	5,000.00	18,150.00	Japanese Yen	360.00	432.50
Turkish Lira	2.82	3.86			

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Since World War II the legal values of a great many currencies have had little to do with the values that people give them. As a result, despite what the law says, there have been plenty of people ready to exchange these currencies at a discount to get other currencies—or precious minerals—that they consider “safer.”

All over the world a network of currency black markets has developed. Some of the transactions in them are flatly illegal, others frisk around the edges of legality. In any case, the trends in the black market value of a nation's money have come to provide a constant comment—often cynical and always revealing—on the actions of finance ministers.

• **New Guide**—Such comments are to be found in plenty in the first issue of what is perhaps the most unusual business handbook ever published—“The 1951 Black Market Yearbook” (Pick's World Currency Report; New York City; \$25). The BMY graphs the rise and fall of the world's currencies during the postwar years and reports on black market conditions in many odd corners of the planet. It gives black market values for foreign currencies in terms of the U.S. dollar. The dollar itself is depreciating in terms of purchasing power and the price of gold in New York's small and highly illegal black market.

The Yearbook's compiler is Franz Pick, a Czech economist who puts out a weekly bulletin on currencies and precious minerals from a little office on the edge of New York City's financial district.

Pick gets information on black market prices from correspondents in such well-known centers as Tangier, Paris, Zurich, Vienna, Istanbul, Bombay, and Hong Kong, plus some lesser-known ones such as Beyrouth, Jidda, and Macao.

Wherever frontiers of several nations come close together, particularly where a small sovereignty, internationalized zone, or colony provides easy entrance and exit for shady operators in neighboring states, you're pretty likely to find a flourishing black market.

• **No Check**—Reports on prices in such markets aren't hard to secure. But Pick also claims to have reliable information on current black market prices in such unlikely spots as Moscow, Bucharest, and Vladivostok. Naturally, he won't disclose his sources or his method of transmission through the Curtain, so

s in Currencies

it's difficult for skeptics to disprove his quotations.

There are a good many of these skeptics around. Pick is the only man in his field, hence there is no constant cross-check to keep him accurate. A good many economists and bankers take Pick with a good-sized grain of salt, but they still are interested in reading what he has to say. His monthly bulletin (price \$240 a year) has about 300 subscribers. These include institutions that take a global view of things, including the Vatican, the Kremlin, and most of the world's central banks. Quite a few gold traders subscribe, as well as importers and exporters. On the list are a number of U.S. corporations with foreign operations. According to Pick, they subscribe in order to have a realistic basis for valuing foreign assets.

• **Pick Stays Out**—Pick himself is a short man with florid manners, who never personally deals in the currencies he quotes. His interest is scientific, although he says he dealt in the black market as a Czech intelligence agent during the last world war.

• **Research**—Pick was born in Bohemia, then part of the Austro-Hungarian empire and now in Red-dominated Czechoslovakia. At the Universities of Leipzig and Hamburg, he did "advanced research work" on such morbidly Teutonic subjects as the "life expectancy of currencies" and "the philosophy of State bankruptcies."

After fighting in World War 1, he went on to Paris, where he became a sort of fiscal Cassandra, a consulting economist to businessmen and financial columnist for "Figaro" and other European journals. Pick counts among his prophetic coups the prediction of the Wall Street 1929 crash (three months in advance), the 1931 devaluation of the pound sterling (two months in advance), and the 1933 devaluation of the U.S. dollar.

Since then, the bankruptcy philosopher claims to have had a practically perfect score on predicting important devaluations. He says he has found that 156 of 180 devaluations during the last century or so took place around the time of the spring or autumn equinoxes (Mar. 21 and Sept. 23 in the northern hemisphere). Pick draws no occult conclusions from this. But he figures it helps to predict when future state bankruptcies will take place.

• **NATO Angle**—Just this week Pick came out with a new slant on the recent NATO meeting at Lisbon. He



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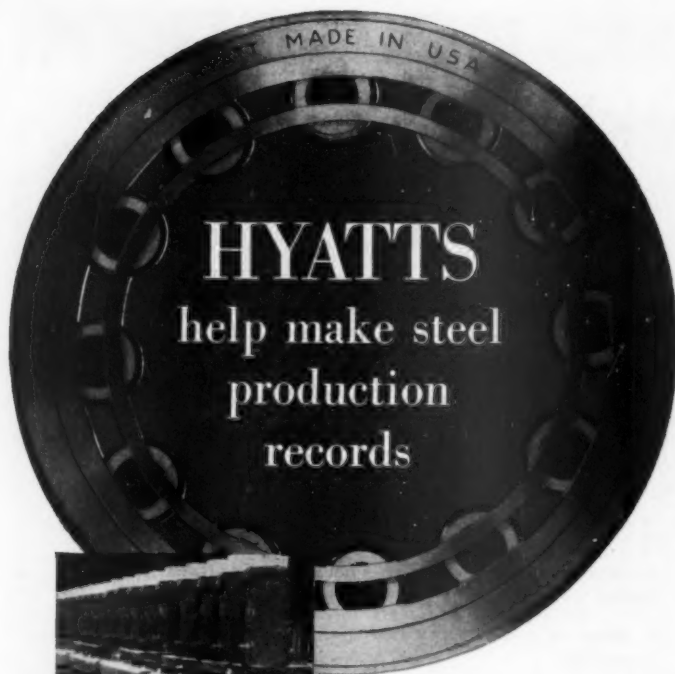
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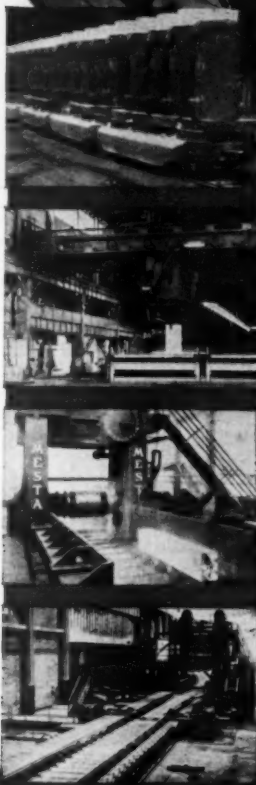
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HYATT ROLLER BEARINGS

"... a business where amateurs are likely to get burned badly ..."

BLACK MARKET starts on p. 118

said that British foreign minister Anthony Eden and his French opposite number, Robert Schuman, had suggested that the U.S. devalue its dollar by raising the price of gold from \$35 an ounce to \$50 and use the \$1-billion "revalorization profit" that would result to bolster the sagging pound sterling and franc. Pick says he doesn't expect Secretary Snyder to take kindly to this. Hence he predicts that the pound and franc will be forced to devalue once more before the end of this year, causing a "monetary earthquake" that will finally lead to devaluation of the dollar to \$50 an ounce in 1953.

Pick came to New York in 1945 and made a living providing chart presentations for annual reports and such, while he got his world currency report going. He still does a sizable volume of chart business, since the overhead on a black market intelligence network is high. And he provides a currency consulting service at a \$1.75 per half hour.

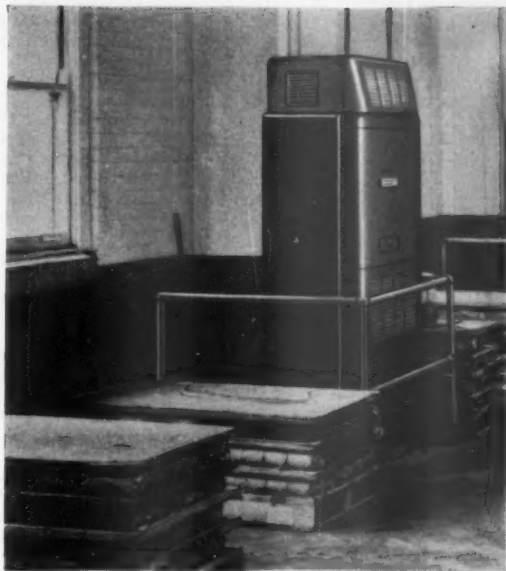
• **\$10-Billion**—Pick believes that black market trading in currencies and precious minerals has never been so widespread as it is today. According to his calculations, there was about \$10-billion worth of illegal trading in 1951. Some call this wicked, and some call it weak. Pick thinks it's good sense.

Pick's cure for inflation is the same that Camille Gutt carried out in Belgium after World War II—a drastic dose of deflation through government action. He points out that the Belgian franc is one of the strongest in Europe. Even stronger, he says, is the Portuguese escudo, "practically free and backed by adequate gold coverage." He considers the escudo, as well as the Canadian dollar, one of the best bets as a hoarding unit. The U.S. dollar, most popular of all hoarding units, lost 7% in purchasing power in 1951, and 9% in terms of the black market gold price.

So you want to know how to speculate in the black markets? Don't do it; it's one of the many businesses where amateurs are likely to get burned badly. But if you just want to exchange foreign currencies for dollars, you'll find dealers in almost any large city. It's O.K. for you to do this in the U.S., but it's illegal to try it in the country whose official currency you hold.

• **Smuggling**—There are various ways for currency and precious minerals to

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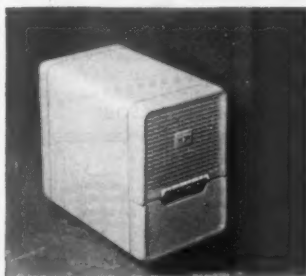


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"... Pick doesn't think
money and banking are in-
extricably connected ..."

BLACK MARKET start on p. 118

slip across borders. Obviously, smuggling is one way. Another method is more subtle. Suppose an Englishman traveling abroad wants to get his pounds out of Great Britain. Legally, he can bring only a small amount out of the country. But once he is abroad, he can buy U.S. dollars or escudos or whatever he wants from a black market dealer. In payment, he transfers pounds from his bank account back in Britain to the account of a British correspondent of the dealer abroad.

Pick classifies five different varieties of pound sterling:

- Commercial sterling, balances resulting from legitimate international trade, and transferred between countries at the legal rate of \$2.80.

- The switch pound, whereby foreigners are legally permitted to buy British securities at a discount (about \$2.35 at yearend).

- Residential sterling, the type used in illegal transactions like those of the traveler mentioned above.

- Diamond sterling, so-called because it is used mainly to pay for illegal diamond shipments from Great Britain. This kind of sterling doesn't go through banks, whose foreign exchange operations are controlled. It comes to the British seller from the foreign buyer through the buyer's British agent.

- Banknote sterling is pocket money arriving from abroad. There is much more of a market for it, Pick says, in North Africa and the Near East than in New York.

- Unorthodox—Pick is by no means an orthodox economist. He complains, for instance, that no U.S. university devotes a separate course to the study of currency.

He doesn't agree with the general opinion that money and banking are inextricably connected. This, in the eyes of a conventional economist, is naive.

A lot of people think Pick overestimates the importance of the world's black markets. Sure, these people say, they exist all right. They do provide a fairly reliable commentary on inflation. But how can they have any major influence on world trade, as long as governments maintain control of the flow of goods across their borders? You can smuggle a small batch of banknotes and diamonds, with a chance of getting through, but a shipload of coal or machine tools is an entirely different proposition.



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PRESIDENT TRUMAN

Turns His Diary Inside Out

"I want the people to know the Presidency as I have experienced it, and I want them to know me as I am."

With this statement, President Harry Truman granted veteran reporter William Hillman the privilege of going through the intimate diary and memoranda of a man in the White House, then sat still for hours of interviews to get the story across.

Out of it all, Hillman, a friend of the President, made a book titled *Mr. President*. Published this week by Farrar, Straus & Young, the book reveals for the first time a lot of the thoughts and writings of a President still in office.

• **Political Value**—Knowing that the book would come out on the eve of a Presidential election, Truman said: "I hope that perhaps the American people will understand a little better what I am trying to do, and historians will have authentic data to add to what is disclosed by the archives."

Truman said that, of course, some people would say the whole project was merely politics, but that he and Hillman knew better. Despite such denials, no political campaign manager worth his salt would pass over such a document as an effective political broadside. If Truman stands for election

again, never doubt that the Democratic organization will buy its full share of the 120,000-copy first printing, and any printings to follow.

• **Historic Value**—"You know," the President also told Hillman, "if Andrew Johnson, for example, had not given special interviews to a number of different newspaper correspondents, voicing his views on problems confronting him, a good deal of important historic material of the Presidency of Andrew Johnson might not have been unearthed or even known."

Truman feels a kinship for Johnson, who succeeded to office on the death of another wartime chief of state. While spiritual kin to Johnson, Truman regards Andrew Jackson, arch opponent of the bank of the United States, as the one man he would like to emulate.

• **Inside Truman**—It is unvarnished raw material that crams Hillman's book. It is frankly a vehicle for the President—a forum from which to speak. Indeed, 60,000 of the 85,000 words of text in the book, freely illustrated with color and black and white photographs by Alfred Wagg, are the President's own words—recorded either in his diary, in his memoranda, or in his interviews with Hillman.

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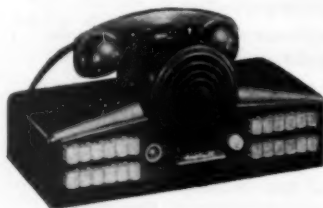
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in the book—a lack not too important in such a contemporary work. But there are disconcerting passages, in which the reader is not guided by time, or place, or identities, that leave you wondering. Example:

"Sept. 19, 1946—Mr. — spent two and one half hours talking to me yesterday. I am not sure he is as fundamentally sound intellectually as I had thought.

"X is a pacifist 100%. He wants us to disband our armed forces, give Russia our atomic secrets, and trust a bunch of adventurers in the Kremlin Politburo. I do not understand a 'dreamer' like that. The German-American Bund under Fritz Kuhn was not half so dangerous. The Reds, the phonies, and the 'parlor pinks' seem to be banded together and are becoming a national danger. I am afraid they are a sabotage front for Uncle Joe Stalin. . . ."

• **Clues**—Who is Mr. Blank or Mr. X? Former Secretary of Defense James Forrestal, in the Forrestal Diaries, quoted Henry Wallace as saying in Cabinet meeting that the U. S. should give the atomic bomb to the Russians. Mr. Truman's entry in his diary of the Mr. X conversation came one day before he announced that Wallace had been dismissed as Secretary of Commerce, one day after he had had a private conversation with Wallace, and one week after Wallace had made a foreign policy speech in New York completely out of kilter with Truman's policies, then being presented by Secretary of State George Marshall in Paris.

These shortcomings of relating quotes to events are troublesome, but do not detract from the privilege of reading an "inside Truman" documentary.

• **Private Thoughts**—What was this gregarious Missourian, lonely in the White House (he couldn't go to see a ball game on the playgrounds south of the mansion because his very appearance would break it up), thinking about and writing about in the privacy of his own rooms?

For one thing, President Truman summarized what he considers the most important achievements of his Administration:

"We have prevented a Third World War. And we have kept the American economy on an even keel. The Russians had the idea that after 1946 we would explode, and then the Russians could have had the world to themselves. We have managed to keep that from happening."

Thoughts about himself:

• "I think I have been right in the approach to all questions 90% of the time since I took over. . . . I shall continue to do what I think is right whether anybody likes it or not."

• "I do trust people. There are ever so many more good men than bad ones in the world." However, Truman later had a somewhat different view: "The human animal cannot be trusted for anything good except en masse."

On politics:

• "It is a pity that some people have a contemptuous idea of politics, because politics under our system is government, and a man who is not interested in politics is not doing his patriotic duty. . . . I am proud to be a politician. . . ."

• "I never ran for an office that I wanted to run for."

• "One rule I did make in the beginning was that I would have nothing to do with money. I just wouldn't handle it. I wouldn't collect it. I wouldn't distribute it. And the boss politicians respected me because of this, although they never did understand it."

• "The nomination of Dewey last night, I think, will make the campaign easier—all he can do is to make a 'warned over' approach to the situation. . . . and I don't think the country is going to take a 'warned over' approach."

On his pet peeves:

• "You newspapermen have a complex that anyone who tells you any of your many shortcomings is either ambitious to be a dictator or else he is an ignoramus. . . ."

• "Editors are peculiar animals—they throw mud and bricks at you the whole year round—then they make one favorable statement which happens to agree with the facts and they think they should be hugged and kissed for it."

• A Jan. 5, 1946, memo to James F. Byrnes, then Secretary of State, who was at the Moscow conference: "I received no communication from you directly while you were in Moscow. The only message I had from you came as a reply to one I had Acheson send to you. . . . The protocol was not submitted to me, nor was the communiqué. I was completely in the dark on the whole conference."

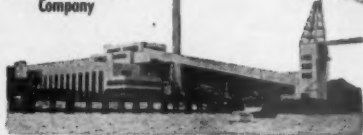
• Another crack at Byrnes, in regard to the Truman investigating committee: "I had asked for \$25,000 to start off. . . . Eventually, the liberal Sen. Byrnes agreed to an appropriation of \$15,000!"

• About John L. Lewis: "He is a demagogue in action."

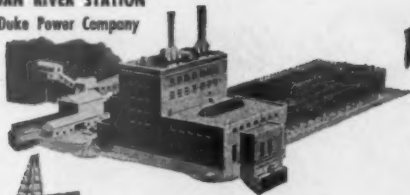
• And about Bernard Baruch (in a letter to Baruch Aug. 31, 1948, at the low ebb of Truman's campaign for election): "I read your letter of the 27th with much disappointment."

(Baruch had turned down the job of Democratic finance chairman.) A great many honors have passed your way, both to you and your family, and

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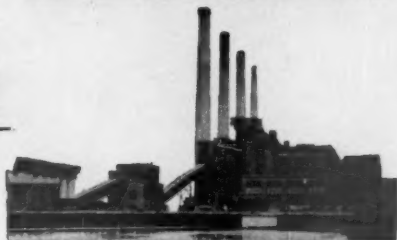
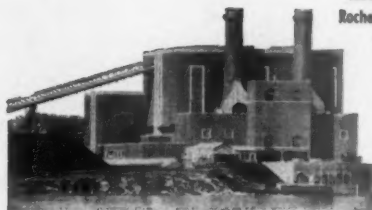


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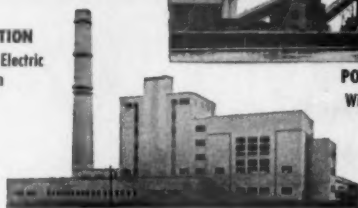


7 of the top 10

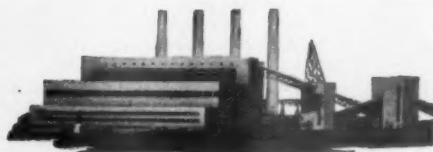
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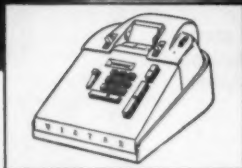
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it seems when the going is rough it is a one-way street. I am sorry that this is so."

• Regarding Gen. MacArthur in a letter dated Apr. 10, 1951: "I reached a decision yesterday morning . . . on the commanding general in the Pacific. It will undoubtedly create a great furor, but under the circumstances I could do nothing else and still be President of the United States. Even the chiefs of staff came to the conclusion that civilian control of the military was at stake, and I didn't let it stay at stake very long."

• In the long run, his powers depend a good deal on his success in public relations. . . . Therefore, the President must be a sort of super-public relations man. His powers are great, but he must know how to make people get along together. . . ."

• "The President has an executive job that is almost fantastic. There has never been one like it. I think no absolute monarch has ever had such decisions to make. . . . No one man really can fill the Presidency. The Presidency has too many and too great responsibilities. All a man can do is to try to meet them."

• "You must know the historical background of what makes the world go round. After all, there is little real change in the problems of government from the beginnings of time. . . . Those problems today are just about the same as they were for Mesopotamia and Egypt, for the Hittites, for Greece and Rome, for Carthage and Great Britain and France. . . ."

On threats of war:

• July 19, 1948: "A meeting with Gen. Marshall and Jim Forrestal on Berlin and the Russian situation. I made the decision 10 days ago to stay in Berlin. Jim wants to hedge. . . . I insist we will stay in Berlin, come what may."


• Dec. 9, 1950: "I have worked for peace for five years and six months and it looks like World War III is near. I hope not—but we must meet whatever comes—and we will."

• "There are a few misguided people who want war to straighten out the present world situation. It is not war that is going to solve this thing, but morals and ideas."

• "The United Nations represents the greatest organized attempt in the history of men to solve their differences without war."

On corruption:

• There would be no corruption if it were not for the corrupters. There are always weak people in every human setup . . . we must find a way to make the corrupter as guilty legally as the one who is corrupted."



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Harmon Elliott Talking

When I went to work for the Elliott Company in 1907, all Elliott Address Cards had a metal frame with a manila paper center, and our competitors advertised that their address plates were 100% metal, and that they sold 87 out of every 100 addressing machines sold.

Certainly in those days metal address plates seemed to be the proper thing.

But in July, 1909, my father-in-law loaned me \$30,000 to buy out my father's partner, and a few weeks later I shocked my father by saying,

"The frame of the Elliott Address Card is all wrong because instead of being made of metal, it should be made of flexible fiber that could be colored and printed and written upon for index records.

"And the center of our Address Card is all wrong because it should be made of Japanese paper that could be stenciled with a regular typewriter."

Today with that kind of an address card Elliott offers addressing machine users the world's only alternative to metal address plates.

Many thousands of addressing machine owners have switched to these non-metallic typewriter stenciled address record cards.

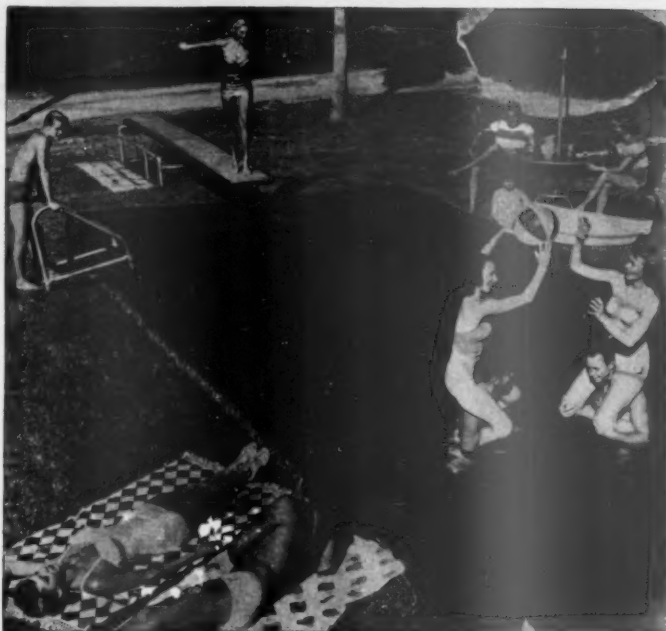
If you are still using metal address plates, you will be very much interested in a booklet I have just written entitled *Stencil Addressing from 1852 to 1952*.

May I send you this booklet?

H. S. Elliott

151-M Albany Street
Cambridge 39, Mass.
(Advertisement)

NEW PRODUCTS



Poor Man's Luxury Item

Swimming pools, like sailboats, have always been pretty high-priced items. But the picture is changing. With plastics, a swimming pool will be available at 15%-20% of its former cost.

The new pool is a collapsible tank made out of heavy vinylite plastic sheeting. It's available in regulation size—27 ft. by 13 ft., graduated from three to five ft. deep—or in any larger or smaller size you wish.

• **Easy to Rig**—To prepare the pool you dig a hole to the same dimensions. The corners of the pool anchor to 2x4 in. pieces of wood. The sides, with lengths of pipe slipped into side seams, drop over a ring of 2x6 in. boards that circle the pool. The lengths of pipe hold the sides of the pool in place. In sandy soil you may have to reinforce the sides of the hole with sheathing. When the pool is in place, just fill it with water and take your first dive.

For drainage, a pipe outlet system can be built in, or a sump pump can be used. The pool can be cleaned with soap, water, and a brush. If you use chemicals for purifying the water they won't hurt the plastic. In fact it's supposed to be so durable that you can leave the pool out all year and the

weather won't hurt it. If an accidental tear develops, the plastic can be vulcanized—like patching a tire. A serious rip can be fixed up by the company.

With the pool, you get two accessories—a cover, for \$50 extra, and an inflatable "bumper," for \$75, that keeps water from sloshing out.

• Source: Bilnor Corp., 53-06 Grand Ave., Maspeth, L. I., N. Y.

• Price: \$275 for pool alone.

Auto Self-Starter

Another entry in the growing list of automatic devices for automobiles is an attachment that automatically starts your engine and restarts it in less than a second when it stalls.

When you turn on your ignition key, Burgua-Stuart takes over and "kicks" on the engine. But it won't get in the way of emergency starting when you have to push or tow the car to get it going. Burgua-Stuart is easily installed on any type engine—in fact, you're supposed to be able to install it yourself in a few minutes.

• Source: Burgua Corp., Dept. D, 86 N. Franklin St., Hempstead, N. Y.

• Price: \$12.

**WHAT MIGHT THE
MINGS HAVE DONE
WITH ALCOA ALUMINA?**

The word "Ming" means "brilliant"—and brilliant best describes the color, decoration and technical facility of Chinese ceramics during the Ming Dynasty (1368-1644). At the imperial porcelain factory of Ching-te Chen, five hundred kilns were required to supply the vast needs of the export trade and the court, which alone used 96,000 pieces. It was these porcelains which made china a household word throughout the world. Yet what might the Ming technicians have produced had ALCOA Alumina been available 500 years ago?

Today's successful ceramic manufacturers have come a long way since the days of the Mings. By adding ALCOA Alumina to their mixes, they have improved the quality of their products in a number of ways. This highly inert, uniformly pure aluminum oxide makes their ceramics stronger . . . more resistant to heat and mechanical shock. It reduces firing deformation and lengthens the firing range . . . decreases quartz inversion and improves whiteness.

And, because it is produced in vast quantities primarily for the aluminum industry, ALCOA Alumina is available to ceramic manufacturers at low cost.

Whether you make "modern Mings" or industrial ceramics, ALCOA Alumina can be of great value to you. Let us tell you how. Write to: ALUMINUM COMPANY OF AMERICA, CHEMICALS DIVISION, 600c Gulf Building, Pittsburgh 19, Pa.

Alcoa Chemicals



ALUMINAS and FLUORIDES

ACTIVATED ALUMINAS • CALCINED ALUMINAS • HYDRATED ALUMINAS • TABULAR ALUMINAS • LOW SODA ALUMINAS
ALUMINUM FLUORIDE • SODIUM FLUORIDE • SODIUM ACID FLUORIDE • FLUOROBoric ACID • CRYOLITE • GALLIUM



Chinese jar, Ming dynasty.
Decorated in colors of the *demi-grand feu*,
with chased brass cover.

POWER FOR PROWLING PANTHERS



*GRUMMAN F9F PANTHER, POWERED BY PRATT & WHITNEY TURBO-WASP

UDYLITE EQUIPMENT

PLATES PRATT & WHITNEY ENGINE PARTS

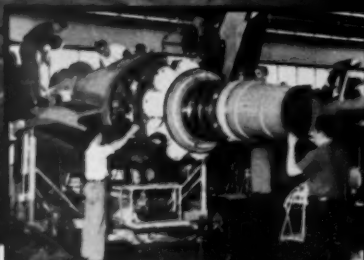
The Grumman Panther—a carrier-borne version of greased lightning—owes a large measure of its impressive performance to its Pratt & Whitney J-42 Turbo-Wasp. This rugged jet engine is flying 1000 hours between overhauls.

The tough, durable finish on vital engine parts is applied with Udylite machines. Pratt & Whitney Aircraft is using Udylite Semi-Automatics, Rectoplatters and other electrical equipment for plating engine components. Parts range from combustion chamber liners to turbine shafts, as well as smaller parts requiring various surface finishes.

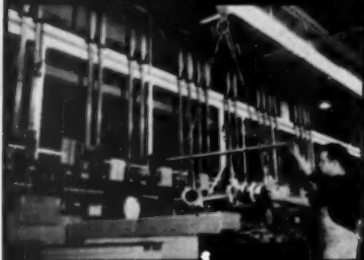
Your production—whether civilian or military—can be improved by Udylite. Have your Udylite Technical Man show you how Udylite can *better your way of plating*—anodizing, carburizing, blackening or any process of either special or standard nature. Or, write to *The Udylite Corporation, Detroit 11, Michigan.*



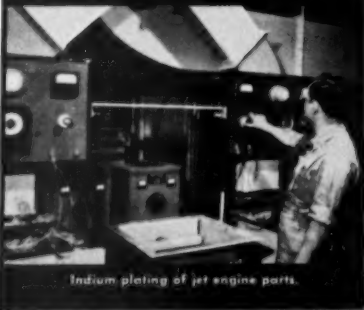
PIONEER OF
A BETTER WAY IN PLATING



Pratt & Whitney Turbo-Wasp
being installed in Grumman Panther.



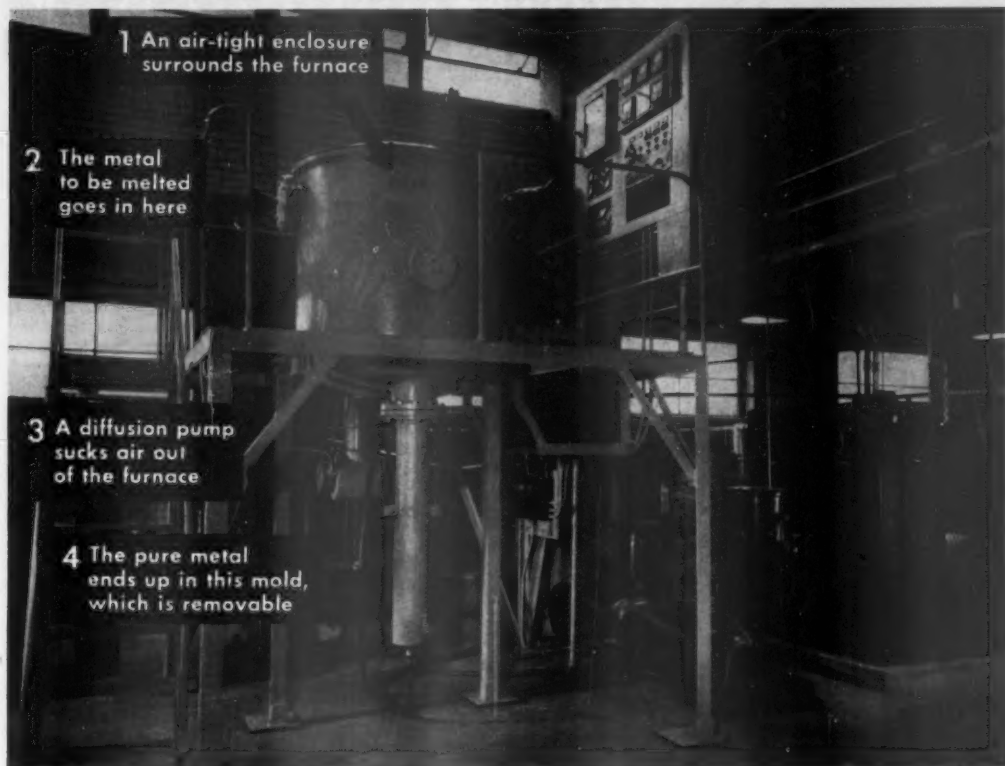
A series of chrome-plating units.



Indium plating of jet engine parts.

THE
Udylite
CORPORATION

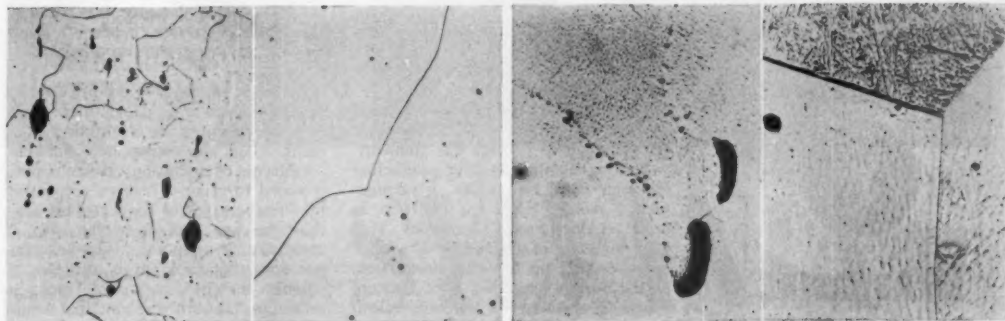
PRODUCTION



HIGH VACUUM for getting rid of impurities is the basis of this development by National Research Corp. To industry, it means . . .

High-Purity Metals at Last

(Story starts on page 134)



IRON: The commercial grade (left) shows black spots, the entrapped gas. The purified iron (right) has hardly any.

COPPER: Gassy impurities are in commercial stuff, too (left), but disappear after it is purified (right).



Tenants insist on comfort

Some folks won't "buy" a hard winter; they choose to sit out that unkind season in Florida. Not so with many of the commodities we coddle at Harborside. They demand a constant winter climate rigidly maintained.

Whatever your requirements, Harborside can meet them. Dry- or cold-storage; cooling, freezing or sharp freezing; free or bonded stores; pool car service; transshipment; office, showroom, processing or manufacturing space. Harborside—opposite Cortlandt Street, Manhattan, five minutes from Holland Tunnel and trunk highways; direct connections with Pennsylvania Railroad; and, by lighterage, with all other lines and freighters. Write or phone about your requirements.



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34 Exchange Place, Jersey City 3, N.J.

IN THE HEART OF THE NEW YORK METROPOLITAN AREA

"...a dream of many metallurgists. A metal is melted in a high vacuum..."

HIGH-PURITY starts on p. 133

Real purity is a rare virtue in a metal. A metal just naturally has small amounts of foreign matter to begin with. It picks up others such as gases and oxides from the air when it is converted from ore, and later alloyed. Metallurgists can pare down the foreign elements to the point where a metal is good enough for most commercial jobs. But they have never worked out a practical way to remove the gases and oxides from metals that go into ticklish applications.

National Research Corp. of Cambridge, Mass., has announced a purifying technique that has long been a dream of many metallurgists. A metal is melted in a high vacuum; this takes out the trapped gases and prevents the formation of oxides. Right now, the process is important to the production of titanium and zirconium. Later, it will probably play a big part in the production of magnetrons—the heart of radar sets and other electronic equipment.

• **Out of the Nest**—NRC believes in keeping its production separate from research. After the bugs have been worked out of a pilot project, it sets up a company for mass production. That's what it did with Minute Maid, a frozen orange concentrate, and Holiday Brands, a soluble coffee, which were developed in NRC labs.

Last week National Research announced that its vacuum process had grown enough to stand on its own feet and that Vacuum Metals Corp. had been formed. Vacuum Metals is now NRC's only wholly owned subsidiary. It has sold all but a minority interest in the other two companies it formed. Dick Morse, the president and founder of NRC, says there are two reasons for holding on to Vacuum Metals:

• NRC thinks that it has a sure winner in Vacuum Metals, doesn't want any of it to get away.

• The operation of the process is so unique that only NRC technicians are equipped to manage the company.

• **Backlog**—Behind its pilot production of barely three tons a day of vacuum-melted metals, NRC has built up an order backlog of over \$1-million. That gives the proof of demand NRC wanted before setting up full-scale production. In the next two months, after Vacuum Metals gets rolling on its own, output is expected to step up to five tons a day—then to 10 tons within a year.

There are plenty of reasons why it will be easy to sell purified metals. A

microscope shows some of them. Seen through it, a cross-section of any ordinary metal looks something like a Swiss cheese (pictures, page 133). The holes are either bubbles of gas or pockets of oxide. The metal also holds a large volume of dissolved gas, but this won't show in a photomicrograph.

• **Gas Pockets**—The pockets of gas, which get into a metal when it is melted, can be annoying. If the metal is to be used in a vacuum tube, for instance, the gas will ooze out of the metal and destroy the vacuum. Also, the holes that gas bubbles make may weaken the metal and shorten its life.

National Research has been working from the logical premise that when you're looking for purity, it's better to keep things away than put them in—that gaseous impurities can't get into metal if there are no impurities around.

• **Diffusion Pump**—This general technique has been known for at least 30 years (a German company, Heraeus-Vacuumschmelze, developed it back in the twenties). But it was not until the recent perfection of the diffusion pump that high vacuums became possible commercially and, hence, that vacuum melting became really effective. When NRC talks about high vacuums, it means vacuums in the order of 10 microns (.01 millimeters) of mercury absolute. Roughly speaking, this is the equivalent of sucking everything but one tennis ball out of a container as big as Chicago's Union Station.

By using NRC copper, melted and cast under that high a vacuum, Raytheon Manufacturing Co. in Waltham, Mass., has been able to cut the time of one step in production of its magnetron power tubes to about one quarter of that formerly required. Raytheon's magnetron operates at a pressure of about 1-billionth of an atmosphere. Using ordinary copper in the anode, Raytheon needed considerable time to evacuate each tube; the more it reduced the pressure in the tube, the more dissolved gas kept leaking out of the copper anode and spoiling the vacuum. Using NRC's gas-free copper, Raytheon has cut evacuating time to a bare minimum.

• **Seals**—A second important use for gas-free copper is in glass-to-metal seals that are common in electronic equipment. Glass and copper have different coefficients of expansion. When copper is sealed to glass, it is often suspended by a feather edge of copper. This edge must be fine enough to flex, but it must also be nonporous. Gas-free copper does that trick. It is also free of volatile metallic impurities such as tellurium, bismuth, and zinc that would react with the glass and weaken it. These impurities distill off during the vacuum melting.

A third and somewhat limited use

Satisfaction guaranteed!



Sylvania Fluorescent Tubes now guaranteed to give results second to none ... money back if not satisfied!

Try 24 Sylvania Fluorescent Tubes of any popular type. If they don't give more light and maintain color and brightness for a longer time than any other brand, send them back with your signed Certificate of Assurance and your money will be refunded.

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Sylvania's research and alert engineering have improved the two essential elements of Sylvania Fluorescent Tubes:

1. **Coil Coatings** contain closely controlled amounts of Zirconium Oxide... a major factor in enabling Sylvania to triple the rated life of its fluorescent tubes.
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Northwestern Mutual Fire Association Office Building, Los Angeles, California, designed by internationally-famous architect, Richard J. Neutra.

Three Types of Mississippi Glass Selected For Design of Contemporary Northwestern Mutual Office Building

A translucent partition of Structural Corrugated glass by Mississippi highlights building interior.

The smart design of this fine, contemporary structure takes fullest advantage of the properties of gleaming glass, the modern material, to achieve an overall feeling of warmth and unity that is as utilitarian as it is beautiful.

Translucent Mississippi Factorlite in the facade effects a striking, subdued contrast in the exterior and floods upper floors with softened daylight.

A unique separation with a practical partition of Structural Corrugated Glass helps keep the interior aglow with "borrowed light". These modern partitions are easier to erect and maintain than conventional materials and avoid that "closed in" feeling... give an atmosphere of spaciousness and friendliness.

More natural illumination for the interior is provided by skylights glazed with Mississippi Smooth Rough Wire Glass, selected for its properties of strength and diffusion.

Leading architects and designers everywhere select glass by Mississippi. Available in a wide variety of patterns wherever quality glass is sold.

Specify Mississippi Glass and make daylight a part of your plan. Send for literature and free samples.



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WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS

for gas-free copper is as wire for magnetic windings, where extra high conductivity is desired. Commercial copper is a good conductor anyway, but gas-free copper may give that extra 3% that's needed; it has no pockets of oxide or voids, which are barriers to current.

Gas-free nickel is just beginning to find an important use in cathode emission tubes where uniformity of composition is essential to reliable performance.

• **Bearings**—Even steel may be improved in some characteristics by vacuum melting. Three manufacturers of antifriction bearings have tested over a ton of NRC's vacuum melted steel for possible use in bearings. They find that vacuum melted steel grade SAE 52100 has up to 300% greater resistance to fatigue than the same grade steel from a conventional melt.

Vacuum Metals now melts many other types of metals for specialized uses. Some of them: molybdenum, chromium, cobalt, magnetic alloys, high-temperature alloys, and germanium—for transistors (BW—Feb. 23 '52, p. 46).

• **Cost Factor**—Vacuum melting does add a cost premium, of course. Depending on the type of metal and the size of the order, it may add anywhere between 20¢ and 60¢ per lb. to the price of the metal.

In high-value items such as electronic equipment, however, the cost increment is far outweighed by the advantages of the improved metal. The \$3 or \$4 worth of gas-free copper in a magnetron, for instance, is a barely ponderable factor in view of the fact that the finished article is valued between \$200 and \$1,000.

• **Competition**—NRC Equipment Division manufactures diffusion pumps along with a large amount of other high vacuum equipment—including high vacuum furnaces. Vacuum Metals Corp., however, will be a production unit only; it will not build equipment. In a sense, then, NRC and its new subsidiary will be competing with each other—the one selling equipment to customers so they won't have to buy metal from the other. NRC sees no real conflict here; it thinks the potential market is more than big enough for both.

Pilot operations in vacuum melting have been carried on in one production furnace in the basement of the sleek, modern building NRC leases from Massachusetts Institute of Technology. Vacuum Metals will stay in that building, but will occupy another wing.

If Vacuum Metals outgrows its present facilities, it has room to expand. Two weeks ago NRC secured several additional acres beside the new plant of its Equipment Division in Newton, Mass., and set them aside for Vacuum Metals—when the time comes.

CHRYSLER AIR RAID SIRENS


Selected to Warn Arsenal of Democracy

DETROIT IS PREPARING WITH **20 CHRYSLER SIRENS**

As guardians of America's primary target, Detroit Civil Defense Officials are acutely conscious of their city's importance to Civil Defense. They are protecting their homes, children and factories with a modern, up-to-date Air Raid Warning System. They are installing Chrysler Air Raid Sirens. Here's why:

The new Chrysler Air Raid Siren produces the loudest warning sound ever achieved for modern production. It is powered by a new 180 horsepower V-8 Industrial engine, making it *independent of vulnerable central power systems*. One or any number sirens may be *remotely controlled* from a central control station if desired. It is clearly recognized over a diameter of 8 miles . . . and it is the least expensive, 138 decibels (100 ft. from throat) of warning sound on the market today!

For complete information, specifications and availability for your city, town or industrial plant write: *Marine and Industrial Engine Division, Chrysler Corporation, 12200 E. Jefferson Ave., Detroit 31, Michigan.*



CHRYSLER

CITY TO GET RAID SIRENS

First Warning Units to Be Installed in March

Detroit's civil defense program took a step forward Saturday as arrangements were made for delivery and installations of a siren-warning system and the first emergency medical supplies began arriving for distribution to casualty care stations.

Brig. Gen. Clyde E. Dougherty, director of the Detroit Office of Civil Defense (OCD) said the first two of 20 sirens would be installed early in March.

The first installations will be on top the Sheraton-Cadillac Hotel, for the downtown area, and the General Motors Building, for the New Center area.

The siren committee of the Detroit OCD decided to use a new type 180 horsepower unit manufactured by the Chrysler Corp. The choice was made after more than a year of study and comparisons of various warning systems.

Dougherty said about \$100,000 was saved by waiting for the development of the new and better siren.

He estimated that the complete warning system would cost about \$200,000, half of which is Federal funds and half City. All but two of the powerful sirens will be placed on roofs of fire stations.

All sirens will be activated from remote controls.



FOUR-FAMILY buildings like this go up in a hurry, thanks to a new technique. Construction men hail . . .

Precast Walls: A House a Day

(Story on page 140)



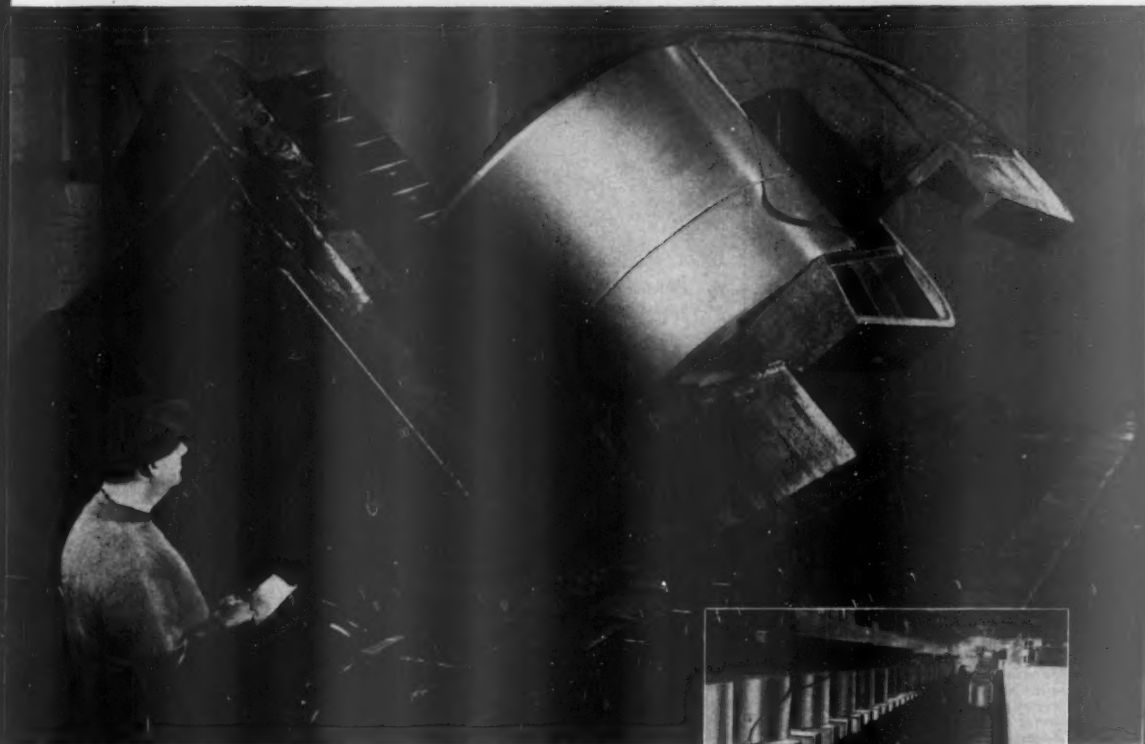
1 A quarter of a mile from building site, concrete for wall is poured in casting bed. Window frames are spotted in place.



2 Foamlas insulation blocks and wire ties go on inner layer of concrete. Outer face of wall is poured on top of this.

LINK-BELT Research and Engineering . . . Working for Industry

It "babies" giant steel coils to boost yield...cut waste



LINK-BELT conveyors economically move up to 38-ton coils with no scuffing, no telescoping

The facility to handle large coils of steel strip efficiently is responsible for much of America's ever-increasing rate of steel production. Specialized conveying systems—designed, built and installed by Link-Belt—play an important part in this continuing progress.

Coils weighing up to 76,000 pounds can now be moved around corners, up and down inclines. Auxiliary devices transfer the coils from one conveyor to another . . . turn, weigh, lower or tilt them—with improved safety and a minimum amount of manual control—to match

the high capacity of modern new mills.

Yet so gently is this done that there's no scuffing of edges, no telescoping of coils. Yield is increased because of lower scrap losses.

Helping steel mills boost output and lick waste in handling coils, plates, rods, billets and bulk materials is typical of Link-Belt research and engineering. In almost any industry you can name, Link-Belt products are showing the way to lower costs in processing, materials handling and power transmission applications.



Link-Belt down-tilter (main photo) lifts coils from double-strand roller chain conveyor, turning them 90° onto troughed gravity rolls. Inset shows Link-Belt car-type coil conveyor.

LINK-BELT

LINK-BELT COMPANY

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A Debutante! Auto-typist's New

Model 5216

Compact—developed especially to meet the correspondence requirements of the smaller office. Flexible—provides for 16 different letters or paragraphs selected instantly from push-button panel. Engineered for electric typewriters exclusively.

*I do the work of three typists
and our letters are answered
on time. Each one is perfectly typed,
no errors, no erasures,
no omissions.*



"For really personal correspondence with my new Model 5216 Auto-typist, here's all I do—touch the Selector button corresponding to the letter or paragraph to be typed, insert the letterhead in the typewriter and type in the date, name, address, and salutation. Then, with a touch of the 'Start' button, Auto-typist takes over, and types the entire letter—all the way through to the close, including the initials."

Auto-typist

Mail this Coupon Today for New Bulletin No. 5216

American Automatic Typewriter Company
Dept. 93-C, 614 N. Carpenter Street
Chicago 22, Illinois

Name _____

Company _____

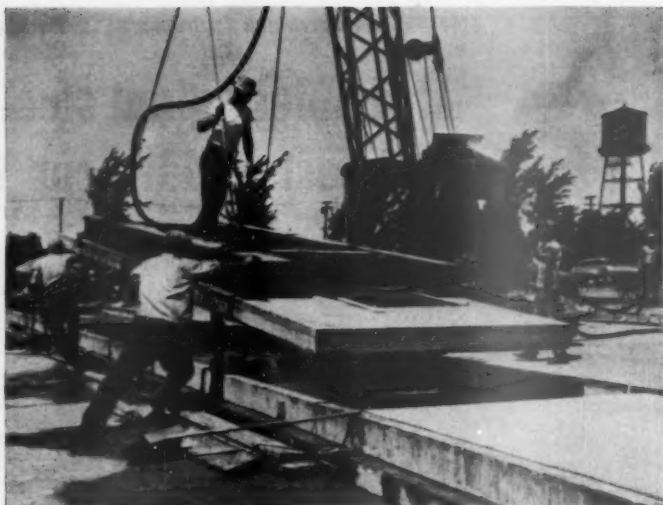
Address _____

City _____

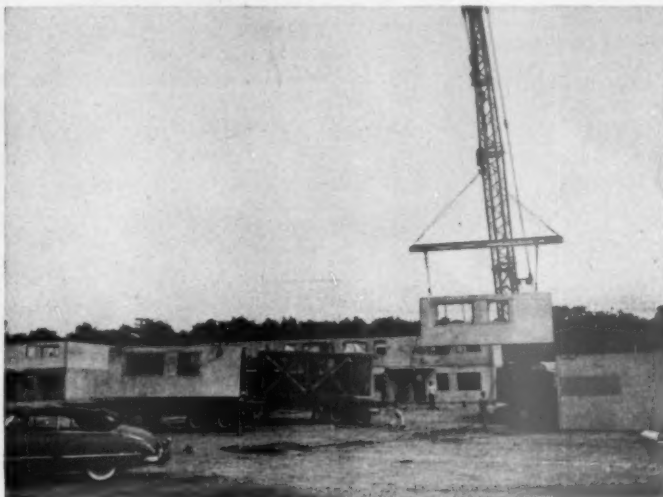
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State _____

World's Largest Mfr. of Pneumatic Typing Equipment



- 3** Prefabricated wall is allowed to harden in casting bed, then lifted onto truck to be hauled away to building site. Wall may weigh up to 7 tons.



- 4** At building site, the wall is lifted off the truck and lowered into place. Projecting steel plates are used to weld floor, walls, and roof together.

PREFABRICATED WALLS SPEED CONSTRUCTION

(Pictures begin on page 138)

Building construction men have added a mass-production technique to their bag of tricks. With it, they are putting up buildings faster than ever, at substantially lower costs than conventional brick or reinforced concrete construction. And the structures are strong, dry, durable, and attractive.

Key component in the new building scheme is a big prefabricated wall panel

with built-in insulation. Engineers call this sandwich construction. The panels are made up on a fast "production line" and assembled as building walls as fast as they are turned out.

• **Mass Plus Production**—At Forrestal Village in Chicago's Great Lakes Naval Training Station, residences are being built with this type of construction for the first time. This \$9-million



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At your fingertips, through EBASCO, is the specialized help of engineers, constructors and business consultants. In a single organization EBASCO combines top-flight talent with experience that penetrates virtually every type of business and industry.

EBASCO is flexible. It can concentrate on a specific, immediate problem . . . or on a whole broad range of operations. It includes the functions of engineers, designers, financial consultants, sales and marketing specialists, cost analysts—whatever specialized skills the problem calls for.

EBASCO men have designed and constructed over one billion dollars worth of new plants. They have built pipelines; made business studies upon which bankers and other executives have based important decisions; helped solve production problems; assisted in developing industrial relations programs. For nearly fifty years, EBASCO has served business and industry in all parts of the world.

To find out how EBASCO can serve you, send for your free copy of "The Inside Story of Outside Help." Address: Ebasco Services Incorporated, Dept. C, Two Rector Street, New York 6, N. Y.



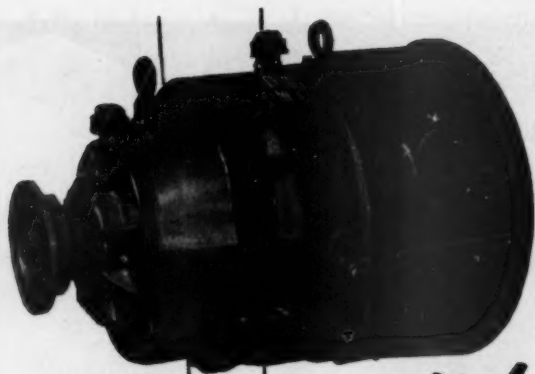
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Business Studies
Consulting Engineering
Design & Construction
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Inspection & Expediting
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Out of the mines flows an increasing torrent of minerals to build the growing might required by the free world.

Improved power equipment brings out mountains of iron, copper, coal, lead, uranium and other essential ores needed to feed the supply lines of military and civilian needs.

Wherever new records are being made by mining men and machines, you'll find most of the machinery put to work through Twin Disc friction and hydraulic drives. The machinery industry is creating more and better production devices for a mightier America . . .

30-40 ton payloads up steep grades with practically no gear shifting—with Twin Disc's sensational Direct Drive Hydraulic Torque Converter (above). Engine and converter combine to perform 90% of braking, too.

Other Twin Disc products provide the connecting link between driving and driven units in leading makes of powered equipment in all of America's basic industries.

TWIN DISC
CLUTCHES AND HYDRAULIC DRIVES

... and Twin Disc applies the power



TWIN DISC CLUTCH COMPANY, Racine, Wisconsin — HYDRAULIC DIVISION, Rockford, Illinois

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"... production averages 4,200 sq. ft. of wall per day ..."

PRECAST WALLS starts on p. 138

project contains 1,000 low-rent dwelling units (3½ to 6 rooms) giving a total of 4,690 rooms. These are housed in 318 one- and two-story buildings, coupled with garage space for 348 cars.

Ten different types of houses are being erected. These include single ranch-type houses, duplexes, double houses, and four-unit apartment buildings. All of these are going up at a superfast clip. The buildings containing the four-dwelling units are being completed at the rate of about one per day.

General contractor and owner of the buildings is Corbetta-Price Co., Inc., a combination of Corbetta Construction Co., of New York, and Price Bros., of Dayton, Ohio. Here's how the company is applying the mass-production methods for fast construction, lower costs:

- **The Line**—The concrete wall fabrication is being done in eight rows of casting beds located about ¼ mi. from the building site. A casting bed is simply a plywood-covered concrete base with concrete sides. It is 10 ft. wide and 300 ft. long. The 10-ft. measurement is the height of the wall panel. The length of the wall panel varies with the particular building type and is established merely by inserting a crosspiece divider in the casting form.

For all types of wall panels made in the beds, production averages 4,200 sq. ft. per day. That means 420 linear feet of 10-ft.-high wall every day—a rate that's head and shoulders above piecemeal brickwork or poured-on-the-job concrete.

- **Everything in Place**—Wire mesh reinforcement for the concrete goes into the bed first, together with the frames for the windows, doors, and kitchen fans. Also inserted are the lifting hooks to handle the finished panel, as well as the steel plates used for welding the wall units together.

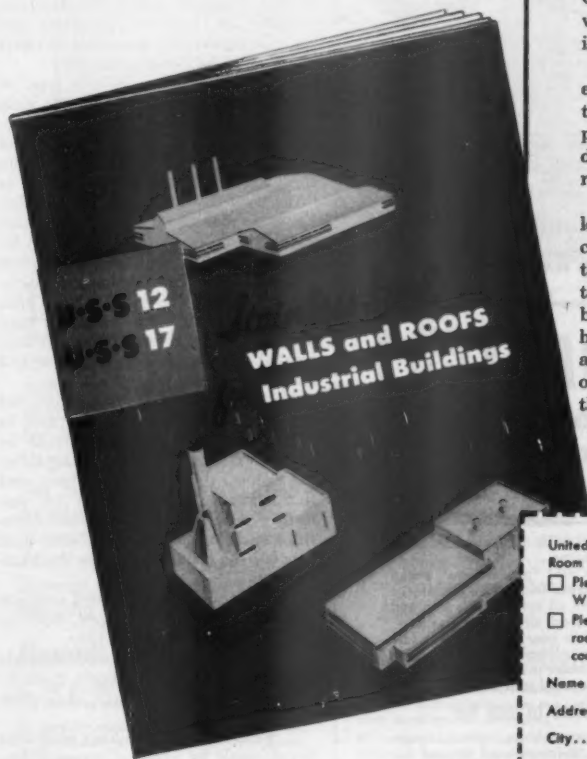
Next, the concrete is poured for the wall's 4-in.-thick inner face. Before this layer hardens, Pittsburgh Corning Foamglas (cellular glass) insulation blocks, 1½ in. thick, are laid in, separated by wire mesh that serves to tie the inner concrete face to the outer face. Then the 2½-in.-thick outer concrete facing is poured over the insulation, and the wall's done.

There are a few finishing touches: Most of the surface is "broomed"; areas around openings are troweled smooth; and designs are impressed in some panels. After three days for

Here's the full story

on today's most practical
wall and roof material
for industrial buildings . . .

U·S·S 12 and 17 STAINLESS STEELS



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Auto. Screw Machine	49 hrs.	5 hrs.	44 hrs.
8 Ton Wood-Working Mach.	32 hrs.	2 hrs.	30 hrs.

*Names on request.



Savings like these—and they are typical throughout industry—can add up to many thousands of dollars a year. And keep in mind that they represent economies in actual cleaning time only. Additional savings of up to 40% in repair costs, less "down-time" for production machinery, and fewer lost-time accidents, invariably result when machinery, tools, equipment and floors are kept clean and free of dangerous, speed-retarding dirt and grease.

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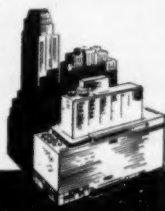
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hardening, the wall is ready for installation.

• **To the Job**—Each wall panel, which may weigh 6 to 7 tons, is lifted from the casting bed with a suction lifting mat and placed on a vertical rack on a trailer truck. Time from bed to truck is only about six minutes. The panel is hauled to the erection site, where a crane picks it up by the imbedded lifting hook and sets the unit in place.

At this point, floor and roof units are installed. These are hollow precast concrete slabs with imbedded steel welding lugs at the ends. Like the walls, they are prefabricated at a nearby bed location. With wall, floor, and roof pieces in place, the steel plates in the panel edges are welded to each other and to the roof and floor lugs to give a solidly connected structure.

Joints are filled in, partitions put up, electrical and plumbing fixtures installed. The house is finished.

• **Other Application**—In this type of construction, the precast concrete walls carry the roof, ceiling, and floor loads. But they can also be hung on a steel framework. In such an application, they carry no load, merely acting as "curtain walls" to enclose the interior. For such service they can be thinner panels, measuring not more than 5 in. thick—1½ in. of insulation sandwiched between two 1½-in. concrete faces. More than 500,000 sq. ft. of this thin precast wall panel is going into a huge ferroalloy plant of the Electro Metallurgical division of Union Carbide and Carbon Corp., at Marietta, Ohio.

• **Factory Cast**—For the Electromet job, the panels are being fabricated in a specially built factory operated by Marietta Concrete Corp. Rolling forms move down dual production lines, and the successive buildup steps are performed at various stations. Four different insulation materials are being used between the concrete faces for the Marietta job:

• **Durisol**, a prefabricated concrete slab with wood-chip aggregate, made by Durisol, Inc., New York City.

• **Porex**, a prefabricated concrete slab with wood-fiber aggregate, made by Porete Mfg. Co., North Arlington, N. J.

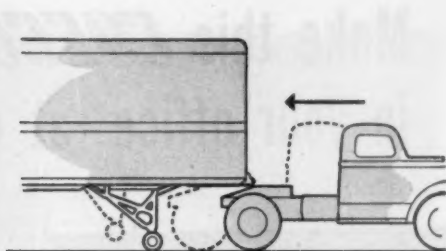
• **Fiberglas**, a glass-fiber insulation board, made by Owens-Corning Fiberglas Corp., Toledo, Ohio, and other companies.

• **Foamglas**, Pittsburgh Corning's cellular glass insulation, also used in the Forrestal Village job.

With any of these core materials, the 5-in. wall panels are reported to have better insulating value than a 12-in. brick wall. Cost of the panels, in place on the building framework, is substantially below the cost for a brick enclosure.

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MADE **SAFER** BY
**FRUEHAUF
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Full Automatic Supports
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DURING World War II, Fruehauf and Army Ordnance engineers successfully developed the Full-Automatic, Cab-Controlled Van-Semi-Trailer for maximum safety and efficiency in moving explosive powder. Nearly 3,000 of these exclusive Fruehauf units were built. They received universal acceptance by both government and privately operated plants throughout the country.

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1. All interior body surfaces are of non-sparking non-ferrous metals.
2. Interior walls and doors are lined with laminated wood fastened with brass screws.
3. The sturdy oak floor is fastened by brass bolts to a steel sub floor.
4. Maximum-opening full-width rear doors and optional side doors swing back parallel to Trailer sides for most efficient loading and unloading.
5. All outside panels are completely weather-lapped, and watersheds above doors prevent leakage.
6. All wiring is protected by conduit and weatherproof junction boxes and connections.

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ELIMINATED!**
**THE DRIVER NEVER
LEAVES THE CAB!**

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MODEL 16-3



MODEL 30-A

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Illustrated: At top, 17-A Executive Chair, \$48.45 (\$50.95*); also 17-T, armless, \$43.25 (\$45.25*). Extreme left, 16-S Secretarial Chair with spring back, \$31.95 (\$33.45*); also 16-F, fixed back, \$29.95 (\$31.25*). Left, 20-A Side Chair, \$29.25 (\$30.55*); also 20-L, armless, \$23.95 (\$25.25*).

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PRODUCTION BRIEFS



UHF circuits are printed on specially coated plates (left) by Federal Telecommunications Laboratories, a subsidiary of International Telephone & Telegraph Corp. Present-day circuits use costly, precision-made waveguides, called "plumbing" (right). IT&T's printed version is smaller, cheaper.

Mixing paints with ultrasonic sound waves is getting a tryout by Brush Development Co. and Sears, Roebuck & Co. They are experimenting with both pigment grinding and emulsification.

More ceramics will be going into electronic transmitting tubes in years ahead, says J. E. Nelson, sales manager of General Electric's industrial and transmitting tubes. He thinks that "a limit has been reached in power and frequency where glass for tube envelopes is no longer adequate."

Du Pont's new laboratory at Newark, Del., will test the company's products and processes to eliminate hazards to employees and customers. It will also broaden du Pont's research in two other fields: industrial fatigue and clothing comfort. The results will be released to other companies and to researchers in hygiene and medicine.

Petroleum expansions: M. W. Kellogg Co. got the contract for the design and construction of a 45,000-bbl. catalytic cracker and an alkylation plant (for high-octane blends) at the Philadelphia refinery of Atlantic Refining Co. . . . Cities Service Oil Co. is putting up a \$3.9-million gas plant at Bartlesville, Okla., expects a daily output of 200,000 gal. of liquid products. . . . Sulfur from natural gas is the specialty of an extraction plant for Phillips Chemical Co. at Goldsmith, Tex.



Clean Air and Telephones



The dial 'phone is such a familiar part of each day's transactions that we forget the intricate pattern of precision mechanisms which make it function. Take the automatic dial exchange. This "nerve center" of the system contains infinitely complex relays of minute contact points that require clean air to function properly. A mere particle of dust or smudge of soot on a contact may throw an entire series out of order and seriously interrupt service. That is why clean air is a must with dial telephones.

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Baker
INDUSTRIAL TRUCKS

DEFENSE BUSINESS

CHECKLIST:

Defense Regulations

The following listing and condensed description cover all the materials and price-control regulations issued by the defense agencies during the preceding week.

Full text of the materials orders may be obtained from National Production Authority, Washington 25, or from any Dept. of Commerce regional office.

Full texts of the price orders may be had from the Office of Price Stabilization, Washington 25, or from the regional OPS office in your area.

Materials Orders

Ferroalloys: Eliminates the filing of individual requests for allocations of nickel anodes, salts, chemicals, oxides, and catalysts by permitting the supplier to lump orders and make a single application to NPA. M-80 as amended (Mar. 12).

Chemical wood pulp: Suspends until July 1, 1952, the reserve production and consumption controls on unbleached sulfate wood pulp. Also increases inventories to 120-day supply for unbleached sulfate and a 90-day supply for unbleached sulfite. M-72 amended (Mar. 12).

Cans: Permits canners and packers to use any quality of secondary tin mill plate for packaging any commodity without having the material charged against percentage quotas defined in the order. M-25, Amdt. 1 (Mar. 13).

Crushing bort and diamond powder: Provides a mandatory monthly reporting procedure covering inventories, receipts, sales, consumption, and reclaimed quantities of these materials for all consumers, reclaimers, importers, dealers, brokers, and other holders who engage in transactions involving more than 10 carats of these materials in a month. M-102 (Mar. 13).

Cadmium: Relaxes controls on use of cadmium to permit its unrestricted use in items or processes specifically defined and to fill orders bearing the ratings A, B, C, E, and Z-2. M-19 as amended (Mar. 13).

Diamond grinding wheels: Places restrictions on users and manufacturers of diamond grinding wheels to conserve diamond crushing bort and make a more equitable distribution in the trade. M-103 (Mar. 13).

Passenger cars: Revokes order regu-

lating production of passenger cars by integrating automobile production into the Controlled Materials Plan. Restrictions on automatic transmissions and use of secondary aluminum in manufacture of aluminum engine pistons remain in effect. M-60-80 revocation. (Mar. 14).

Pricing Orders

Copper scrap: Sets ceilings on dealer-to-dealer sales of copper scrap and copper alloy scrap. CPR 46, Amdt. 2 (eff. Mar. 12).

Petroleum products: Authorizes maximum container deposit charge for steel drums used as shipping containers for petroleum products. CPR 17, Amdt. 15 (eff. Mar. 15).

Livestock distribution: Sets up procedural regulations to provide machinery for hearings, oral arguments, and appeals for persons adversely affected by orders issued under the meat distribution regulation. DPR 1; DR 1, Rev. 1; Del of Auth. 11, Rev. 1; Del of Auth. 12, Rev. 1 and Suppl. 1 and 2; Del of Auth. 56 (eff. Mar. 17).

Tomato sauce: Authorizes canners of 8-oz. containers of tomato and hot sauce to make slight increases. CPR 55, SR 5, Amdt. 2 (eff. Mar. 17).

Synthetic rubber: Sets up ceiling prices for export sales of GR-S type. CPR 61, SR-2 (eff. Mar. 17).

Window washing services: Permits suppliers of window washing and janitorial services for office buildings in the New York City area to increase ceilings by the dollars-and-cents amount of wage increases granted the industry after Jan. 25, 1951. CPR 34, SR 13 (eff. Mar. 12).

Retail machinery sales: Grants manufacturers the option of establishing their own ceilings under the same regulation they used to establish ceiling prices to all other classes of purchasers. CPR 30, Amdt. 32 (eff. Mar. 15).

Lumber: Sets up dollars-and-cents ceilings for sales by manufacturers of fir and hemlock lumber produced in California and west of the Cascade Mountains in Washington and Oregon. CPR 128 (eff. Mar. 18).

Horsemeat: Establishes dollars-and-cents ceilings on sales of fresh, frozen, and cured horsemeat at wholesale; fresh and frozen horsemeat at retail; and sales of canned horsemeat by processors only at wholesale and retail. CPR 129 (eff. Mar. 14).

Nash passenger automobiles: Sets up higher basic retail prices for the new 1952 models of the Statesman and Ambassador series. CPR 83, Sec. 2, Spec. Order 17 (eff. Mar. 13).

LADISH

Controlled Quality

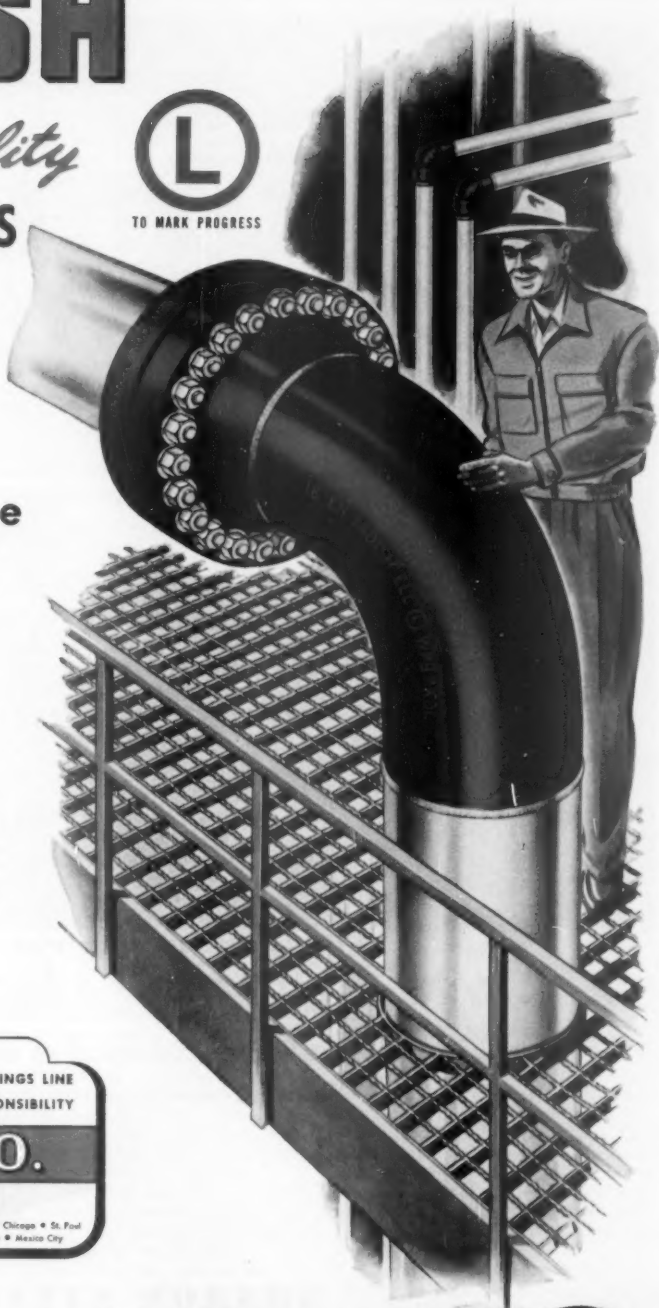
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Sound metallurgy... the result of unsurpassed facilities and advanced laboratory controls... provides the maximum of dependability in Ladish Controlled Quality fittings. Every phase of metal quality... composition, structure and physical properties... is continuously safeguarded—and certified proof of metallurgical integrity is available to users of Ladish fittings.



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For complete technical information and advice, contact the Sharon district office nearest you, or write direct to Sharon Steel Corporation, Sharon, Pennsylvania.

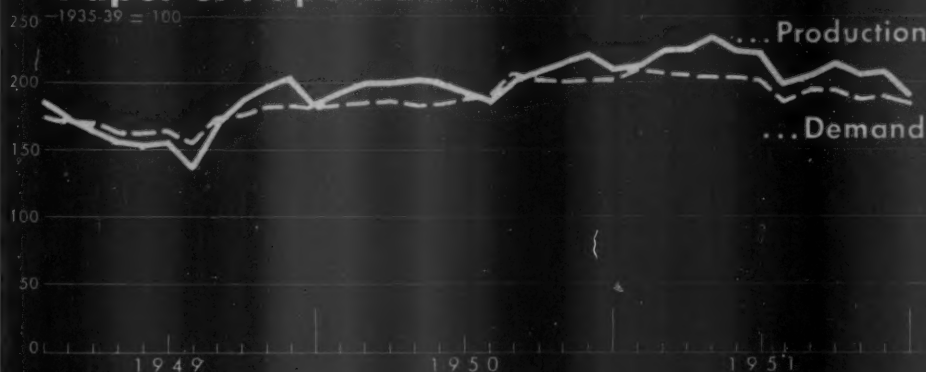


SHARON STEEL CORPORATION

Sharon, Pennsylvania

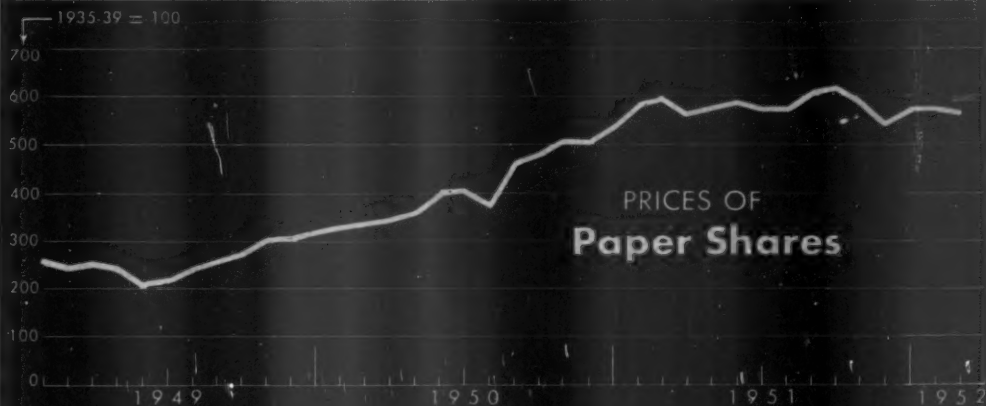
FINANCE

Paper & Paperboard...



Data: American Paper & Pulp Assn.

PRICES OF Paper Shares



Source: Investment & Economics

Investor Gotrocks Calls His Broker

Hamilton Gotrocks read something in the morning paper last week that made him call his broker in a hurry. Crown Zellerbach Corp., a big West Coast paper company, had decided to surrender a certificate of necessity it got last May to build a kraft pulp mill that would have cost it \$20-million or more. Gotrocks, who had big holdings in paper shares, thought that he could recognize a straw in the wind when he saw it.

• An Omen—The language of Crown's announcement worried Gotrocks, who had been through some fast ups and downs in paper before. The announcement said that due to "continued short-

ages of steel, copper, and other materials the construction could not be efficiently and economically completed under present conditions." That sounded fishy to Gotrocks, who knew that materials look a lot easier now than they did last May. Something else was to blame, he figured.

The announcement went on: "Another material factor affecting our decision was the substantial increase in kraft pulp production facilities in the U.S. and Canada, construction of which has been started or is now contemplated, since our application was filed." In other words, guessed Gotrocks, the paper industry is beginning

to get itself overbuilt. Will this go far enough to really hurt earnings?

• Question—Gotrocks was no expert on the paper industry. But he did know two things: (1) Consumption of paper, particularly of paperboard (for containers), is sensitive to changes in business conditions; (2) in past boom periods, the industry's productive facilities have expanded so fast that subsequent recessions have led to "cutthroat competition" and sharply lower profit margins in order to keep mills running. The industry got a small taste of this in 1949 (upper chart).

That's why Gotrocks asked his broker, J. Frank Ticker of Bull, Bear



COMPLETELY FLEXIBLE

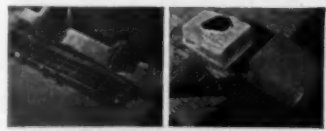
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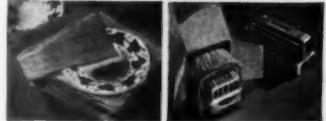
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& Co., if he thought he should sell. Since the bull market started in 1949, Gotrocks had run up some sizable paper profits in paper (lower chart, page 151). Only one or two groups, in fact, have done better in the bull market (BW—Mar. 8 '51, p159).

Unless the paper group was really on the skids, though, Gotrocks didn't want to cash in his profits, because of taxes.

• **Answer**—Ticker advised Gotrocks to hang on to his shares. And Ticker told him why:

The situation in kraft pulp isn't necessarily an index of what is going to happen to the whole pulp and paper industry. You've got to remember that paper isn't really one industry; it's a group of related industries. Usually, it's considered one unit because one concern is likely to operate in several of its segments—pulp, paperboard, newsprint, kraft paper, book and fine paper, building paper and board.

The industry as a whole has increased its productive facilities fast in the past few years. About \$1-billion has gone into plant since 1940. Production of pulp and paper has just about doubled since 1939. But the increase in kraft facilities has been particularly rapid—which explains why kraft was one of the first segments to start cutting back.

Much of the capacity increase came about when building controls and accelerated depreciation first came in. Many companies in the paper industry jumped in at that time with some sort of new project. It was pretty well expected around the trade that some of these plans wouldn't be carried out when it came time for the company to start building. Crown's kraft project is one of the first to be called off, but millmen figure that other postponements or abandonments are likely, too.

• **Still Strong**—Actually, the various segments of the industry don't show too many signs of price weakness. One instance of this strength is the situation in pulp:

Since the war, Scandinavian pulp has sold at premium prices in U.S. markets, and a reduction in its price has often been a tipoff to lower U.S. prices. But the latest cut in Scandinavian pulp probably won't have that effect. This time it seems that the shoe is on the other foot. Scandinavian prices are coming down partly because U.S. and Canadian pulp production has been built up.

Paperboard, the section most sensitive to general business conditions, since industry is its chief customer, has shown no real price weakness as yet. Moreover, not only has the backlog of unfilled orders begun to level off, but (it had been falling precipitously since the middle of 1951) volume of new

orders has been improving lately. And in recent weeks the operating rate in paperboard has moved up slightly. For the week ended Mar. 8, according to the America Paper & Pulp Assn., it was 86%. It had been 83% the preceding week.

• **A Balance?**—In other words, it is possible—though by no means proved—that paperboard has made its readjustment.

• **White Paper**—Although paperboard production has shown some signs of stability lately, some experts believe that white paper may be due for some trouble now. "White paper" includes book (and magazine) paper, and tissue paper. Output rolled along at or near operating capacity all through 1951. But the operating rate has dropped a little this year.

Some people think this indicates white paper may be due for a shakeup in the near future, similar to the one paperboard has been going through. Other industry spokesmen deny this. They point to the fact that book paper prices were raised just recently.

• **Bargain**—Just the same, a little story is being told around Wall Street that may be significant, if it's true. A certain paper company, the story goes, was discussing a renewal of its contract the other day with a big magazine. The paper maker started off by asking a higher price. But when the two parties got down to brass tacks, the magazine ended up with a 10% lower price than before, for a 10-year contract.

• **Lower Earnings**—Newsprint, though still holding up strong, isn't selling at the super-premium prices of earlier years. Yet there's one factor that has developed lately to plague the U.S. companies. The Canadian dollar (which had been at a discount) now sells at a slight premium in relation to the U.S. dollar. That, in effect, is a cost increase to American companies.

Naturally, the paper industry is going to have lower earnings this year than last. But nothing like rout can be foreseen. Most people feel that the long-range outlook for the industry is solid as long as U.S. population continues to expand. Per capita consumption has risen from 319 lb. in 1946 to 415 lb. in 1951. The average U.S. citizen is, by a considerable margin, the biggest paper user in the world.

But some economists pour cold water on the idea that per capita paper consumption will keep going up and up indefinitely. They point out that the number of families being formed is now falling off sharply. And they believe that's going to have a lot to do with checking a rise in per capita paper consumption, as well as the consumption of lots of other things.



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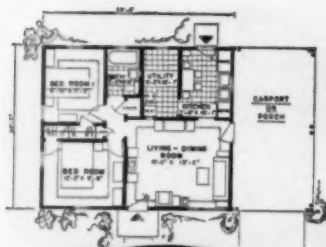
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● The National Voluntary Credit Restraint program got an extension of life on its first birthday.

● Chairman Oliver Powell and his national VCR committee are writing tighter rules.

● That's in line with Treasury fears of unrestrained credit expansion in the deficit financing ahead.

Keeping the Lid on Credit

Voluntary credit restriction—the program that asks money lenders to curb inflation by rationing their own loans—celebrated its first birthday last week. Even its best friends hope it will never have another. But at the same time, they are cheerfully making plans to strengthen and encourage it in the months immediately ahead.

What its supporters hope is that the need for voluntary restrictions will be over by this time next year. Certainly, current soft spots in business are reducing the inflationary scare that created VCR in the first place.

But the Treasury Dept. has asked VCR to stay around a while. With a period of deficit financing ahead, Treasury is afraid of another upward surge of prices and another round of unrestrained credit expansion.

• **New Rules Coming**—VCR doesn't make rules. But it tells regional committees what kind of lending practices feed inflation without helping mobilization. The definitions are going to be hardened.

Tightened standards will be announced after a meeting of the national committee Mar. 28. The committee will be asked to consider such additional recommendations as these:

• A closer watch over revolving credits set up by banks and other lenders. Officials feel that a line of credit originally obtained for a recommended purpose often is diverted to something else subsequently if it is simply renewed as a matter of routine.

• More scrutiny of stand-by credit lines. Forward commitments have been a big problem in cases where the money—when called for—is likely to be used for nonessential purposes.

• Discouragement of municipal bond

issues for improvements of secondary roads.

So far, most of the private loans turned down as not meeting VCR standards have been for inventory expansion or real estate speculation. Corporations have been discouraged from borrowing to buy or retire their own stock. Loans for the purchase of existing businesses have been frowned on.

Chances are that the next set of recommendations will contain a renewed warning about nonessential projects. Officials have in mind the possibility of a round of credit for building TV stations, for example. VCR may be asked to pin an inflationary label on such loans.

• **Flexible**—Though the general trend of policies coming out of the Mar. 28 meeting will be in the direction of restriction, VCR has shown it can move the other way, too. Last winter it found its limit of 50% mortgage loans on upper-bracket houses was being widely disregarded. It shifted to a 66% limit.

It may have to change its mind about some public projects, too. One is the proposed \$115-million purchase of Puget Sound Power & Light Co. by seven public utility districts in the Northwest (BW—Jan. 12 '52, p. 135).

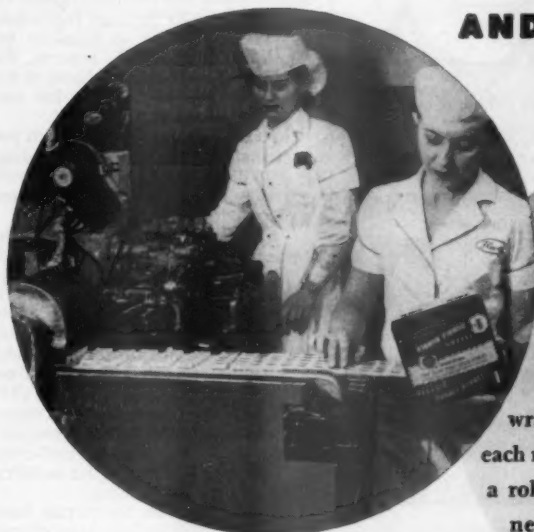
VCR standards have thus far helped block public sale of new bond issues required by the utility districts to finance the deal. But the utility districts have political power locally. Also, they are now arguing that their purchase of the PSP&L properties would lead to more electric power in an area that needs it badly. So VCR's attitude may change.

The committee is still on record against bond issues for such purposes

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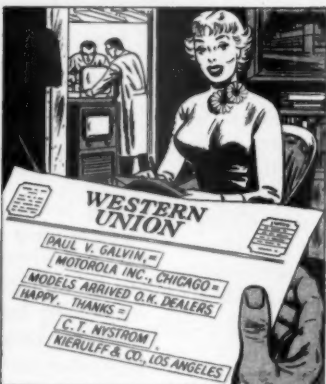
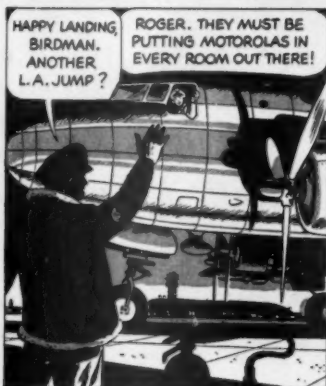
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as soldier bonuses. And it doesn't intend to change its mind. Oregon and Montana have already been forced to postpone sales of bonus bonds approved by their voters. West Virginia was also forced to confine its recent sales of similar bonds to local banks and individuals, plus state funds (BW-Dec. 8 '51, p163).

• **Results**—There's no precise way to measure the effect of VCR. Plainly, it didn't stop a rise in loans. Loans by commercial banks increased \$6.1-billion in 1951, with VCR in operation for nine months. In 1950, however, the increase was \$9.3-billion. Some of the slowing of the rate of gain last year might be attributed to VCR.

Its main task, however, is not to put a general lid on all types of lending. It is to divert money from nonessential to essential uses. Its backers claim success in this.

For example, 220 banks told the Federal Reserve that from July through October last year, loans to textile, apparel, and leather industries declined \$217-million, compared with a \$130-million gain in the same months of 1950. Trade loans to wholesalers and retailers were up only \$40-million, compared with \$272-million in the 1950 period. Loans to sales finance companies were down \$104-million, compared with a \$324-million rise the year before. At the same time, lending for mobilization was rapidly expanding.

What complicates the picture, however, is the fact that large areas of nonessential industry had a drop in sales last year. This may have done a good deal more to restrain their borrowing than VCR did.

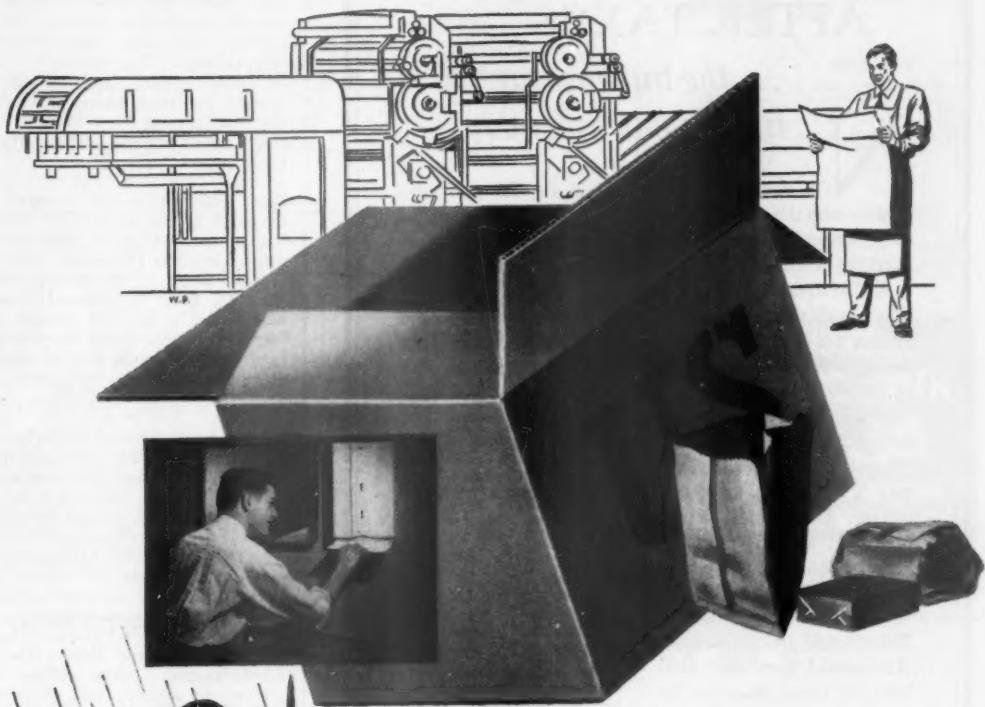
• **Channeling Money**—Behind Treasury's joggling of VCR is the hope that another diversion of funds can be pulled off this year. Treasury hopes that money denied to nonessential projects will go into forthcoming U.S. securities issued to finance the deficit.

Insurance companies, for instance, will have some \$9-billion to invest this year. Private pension funds, it's estimated, will have \$2-billion.

The new assignment given VCR is to see that the Treasury has a chance at such funds. It's a tough job.

Take the life insurance companies. Despite all the Treasuries they've sold in the postwar years for funds to invest in higher-yielding investments, they still hold a good slug of long-term governments. Not all the \$9-billion they must invest this year is "free cash" either. At the end of January, according to VCR estimates released recently, 45 companies accounting for 85% of all the life trade's assets already had outstanding "investment commitments" of over \$4.1-billion. And about \$2.4-billion were expected to be taken up during the following six months.

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Yield Comparison Examples (Based on Joint Return under Revenue Act of 1951)

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30,000		5.32%
45,000		7.35%
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75,000		7.81%
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FINANCE BRIEFS

Last week's new issue offerings included several fast movers, but altogether the market had a somewhat sluggish tone. The reasons: (1) over-optimistic pricing, and (2) general caution by smart buyers, well aware that the coming flood of new issues could soon produce more attractive offering prices.

New Jersey voters will be asked this fall to O.K. the sale in 1953 of \$285-million new bonds to build another express highway. Governor Alfred E. Driscoll thinks an interest rate of less than 2% could be obtained if bonds were issued by the state instead of an "authority." They could be retired, he says, by use of tolls, plus—if needed—present state gas tax and other revenues.

Westinghouse Electric Corp. has sold \$125-million of the \$250-million 30-year 3½% debentures that institutional investors recently contracted to buy at par. It will sell another \$50-million on June 16, the remaining \$75-million next December. The buying group has also agreed to take \$50-million more next March if the company needs the cash for its expansion program.

Southern California Edison Co. has asked the state public utilities commission to approve sale of 800,000 shares of new common (some \$28-million worth at present market prices) without competitive bidding. It wants to negotiate a deal with a syndicate headed by First Boston Corp. and Harris, Hall & Co.

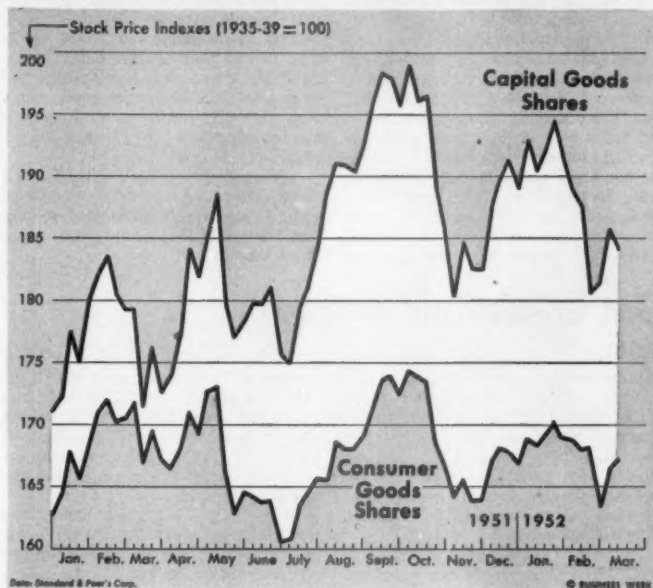
Pittsburgh Plate Glass Co., for the first time since its organization in 1883, is planning public offering of debt securities: \$40-million in 15-year bonds.

Commercial and savings banks, pension funds, and life insurance companies absorbed most of Aluminum Co. of America's recent offering of \$125-million 12-year 3½% debentures. Life companies bought 24%, pension funds 26%. Banks took 34% of offering.

Republic Steel has borrowed \$30-million direct from an investor group at an "interest cost of less than 3½%." Company would not identify the buying group or give maturity date.

Recent common stock offering to Chain Belt Co. stockholders proved a big success. They subscribed to 96% of the 81,512 shares offered at \$34.

THE MARKETS



Consumer Goods Shares Gain

Strength in autos and TV boosts consumer stock index—as does the promise of more materials. But the rise fails to wipe out the edge held by capital goods stocks.

Consumer goods shares are doing a bit better than stocks of the capital goods industries in this lackadaisical market. Both are down, of course, from their bull market highs of last fall. But Standard & Poor's index of consumer goods shares hasn't gone down much, and their recent rally shows a bit more staying power.

If you interpret stock prices strictly in terms of today's business, this might seem rather odd. After all, there hasn't been any recession in capital goods industries. But many consumer goods industries, as everyone knows, have had sticky going for about a year.

• Faster Rise—Still, there is an axiom in Wall Street that what goes up the fastest usually comes down the quickest. The capital goods stock index climbed a lot faster than the consumer goods index last year. It reached a postwar high then, while the consumer goods index was never quite able to break through the high it reached in 1946. So, when the market as a whole ran into trouble, the capital goods shares proved the more vulnerable.

This kind of explanation for market behavior is what Wall Street calls a "technical" approach. That is, it is developed from the statistics that the market itself grinds out. When you consider the effect of business conditions on stock prices, you are said to be taking a "fundamental" approach. Most market analysts use both methods of looking at the general market.

They have a couple of "fundamental" reasons for the consumer goods stock index behaving better lately than the capital goods index. The good showing of the auto stocks and the recent revival of interest in TV has done a lot to improve the consumer goods stock index. Lately, the decision to stretch out arms production has assured the auto makers and other producers of durable consumer goods that they are going to have more materials than they expected. On the capital goods side, signs of caution in capital construction have begun to appear in at least one industry (page 162).

• Abnormal—Actually, the present relationship of the two indexes, with the



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capital goods stock index on top, is abnormal. Over the years, the consumer goods stock index has usually been on top. On the rare occasions when the capital goods index has gained the advantage, trouble has usually followed in the stock market.

One analyst, whose reputation for calling general market trends is good, points out that the 1929 crash came after the consumer goods stock index had fallen off and the capital goods index had moved sharply upward, passing the consumer goods index. The same thing happened in 1937, and on a smaller scale in 1938 and 1939. And practically every other time the capital goods stock index has moved above

the consumer goods index, the stock market has soon gone into a long-term decline.

• **Disturbing**—This analyst considers the present unusual relationship of the two indexes a rather disturbing sign, though by no means necessarily a portent of the end of this bull market. After all, the capital goods index has been above the consumer goods index ever since late 1950—and nothing serious has happened yet. History doesn't always repeat itself.

Adding it all up with other factors, though, this forecaster thinks that we're going to see a lively market before long—and that the odds are for prices going down, not up.

GM Loses Title to Esso

General Motors Corp.'s long reign as the nation's biggest corporate earner has ended—at least temporarily.

Last year saw a new Mr. Big crowned: Standard Oil Co. (N. J.). Esso had long been runner-up—but often a poor second, too. In 1950 its earnings—though second largest—were less than half the size of GM's historic \$834-million net.

Causes of 1951's shuffle: a 39% skid in GM's earning power last year and an estimated 34% hike in the profits of the country's biggest oil company. The net of the giant auto maker nosedived to \$506-million (its lowest level since 1948), while Esso profits rocketed to a record-breaking high—in the neighborhood of \$550-million, many Wall Streeters now figure.

• **Many Villains**—GM's drop in profits last year wasn't due primarily to the slump in its sales volume: Volume actually slipped only \$65-million under 1950's historic \$7.5-billion total.

Trouble, according to the 1951 annual report that GM released last week, was "higher tax rates, lower civilian volume, higher costs, price controls, and a greater proportion of military business, on which the profit margin is lower than on civilian goods." Due to such factors (table), the report said, only 6.8¢ of each sales dollar could be retained as net profit last year. That compares with 11.1¢ in 1950, an average of 9.7¢ in 1947-49, 12.6¢ in 1936-40, and 17.7¢ in 1928-29.

Costs generally showed a rise of around \$231-million. And the company's increasing participation in the defense program called for a special charge against earnings: \$35-million to provide for "reconversion and plant rehabilitation costs incident to the defense emergency."

• **Mostly Tax**—But what really hurt was GM's 1951 tax bill. With \$983-million of U.S. and foreign income and excess profits taxes, this added up to well over \$1.1-billion. And it took 15.3¢ of each dollar of gross income to pay it.

Because of the sharp drop in earnings, GM had to cut its common dividend payments. These were only \$350-million, compared with 1950's \$526-million. And after their payment, only about \$143-million was left for reinvestment in the business, the smallest amount since 1947.

That sum wasn't enough to maintain the company's current position at its 1950 yearend level. Working capital dropped \$50-million to \$1,457,000,000; quick assets (cash, government bond holdings, and receivables) covered current liabilities only 1.18 times as against 1.36 times when the year started; cash and governments alone were equivalent to only 86% of current debts, compared with 111% earlier.

Here's how GM's sales, net income, and profit margin last year stack up with some of its earlier performances:

	Net Sales	Net Income	Profit Margin Net Income as % of Sales
1928.....	\$1,459,762,906	\$276,468,108	18.9%
1929.....	1,504,404,472	248,282,268	16.5
1936.....	1,439,289,940	238,482,425	16.6
1937.....	1,606,789,841	196,436,598	12.2
1947.....	3,815,159,163	287,991,373	7.6
1948.....	4,701,770,340	440,447,724	9.4
1949.....	5,700,835,141	656,434,232	11.5
1950.....	7,531,086,846	834,044,039	11.1
1951.....	7,465,554,851	506,199,560	6.8



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A New "Ally" for Reuther

UAW chief launches a new attack on foes in Ford local. And it was his old Congressional sparring partners who gave him the excuse to oust leaders accused of being Reds.

Few unions have been more vociferous than CIO's United Auto Workers in denouncing the House Un-American Activities Committee as "witch-hunters." And no non-Communist labor leader anywhere has equaled UAW president Walter Reuther in lambasting the committee.

Yet this week Reuther and the committee were working together on the UAW like a well-rehearsed vaudeville team. This was the sequence of events:

- A subcommittee of the House group held hearings in Detroit; put on the record the sworn testimony of witnesses that Communists held important posts in UAW's biggest unit—Local 600 at Ford.

- A few hours after the hearings, the Reuther-controlled UAW executive board ordered Local 600's officers to appear for what was, in effect, a trial to determine whether the local should not be taken out of their hands.

- Using evidence developed by the Un-American Activities Committee, the Reuther board took over the local. The grounds: that it had violated the UAW constitution, which forbids the holding of union office by Communists and those subservient to the Communist party.

- From Washington, to which the subcommittee had returned, Rep. Francis Walter, the chairman, issued a statement praising Reuther for acting on the committee's findings and purging Local 600.

- **Long Fight**—That's just the beginning of what is a new round in Walter Reuther's running fight with the group, unfriendly to him, that has been in control of the Ford local.

The UAW constitution provides that 60 days after a local's officers are removed there must be a new election. Carl Stellato, deposed president of 600, and his anti-Reuther associates will run

for reelection. Reuther has only two months in which to destroy the majority support they have had, or face the most serious setback he will have had since he took over the union's helm.

The industry in Detroit is betting Reuther can't do it. It looks forward apprehensively to a new period of more intense factionalism in UAW, which will have an unsettling effect on labor relations in the industry.

But the industry has underrated Reuther before, and it may be doing so again. It is worth noting that, after temporizing for a long time on both the Communist problem in Local 600 and the center of opposition to his administration at Ford, Reuther took the initiative in the fight. He could have kept on ducking it.

- **Top Aide**—Now in the ring, he's playing for keeps. The industry can be sure that everything Reuther does for the next two months will be pre-calculated for its effect on this internal battle. That he's made it UAW's highest priority concern is evidenced by the fact that he put Jack Conway in charge of Local 600 for this interim period.

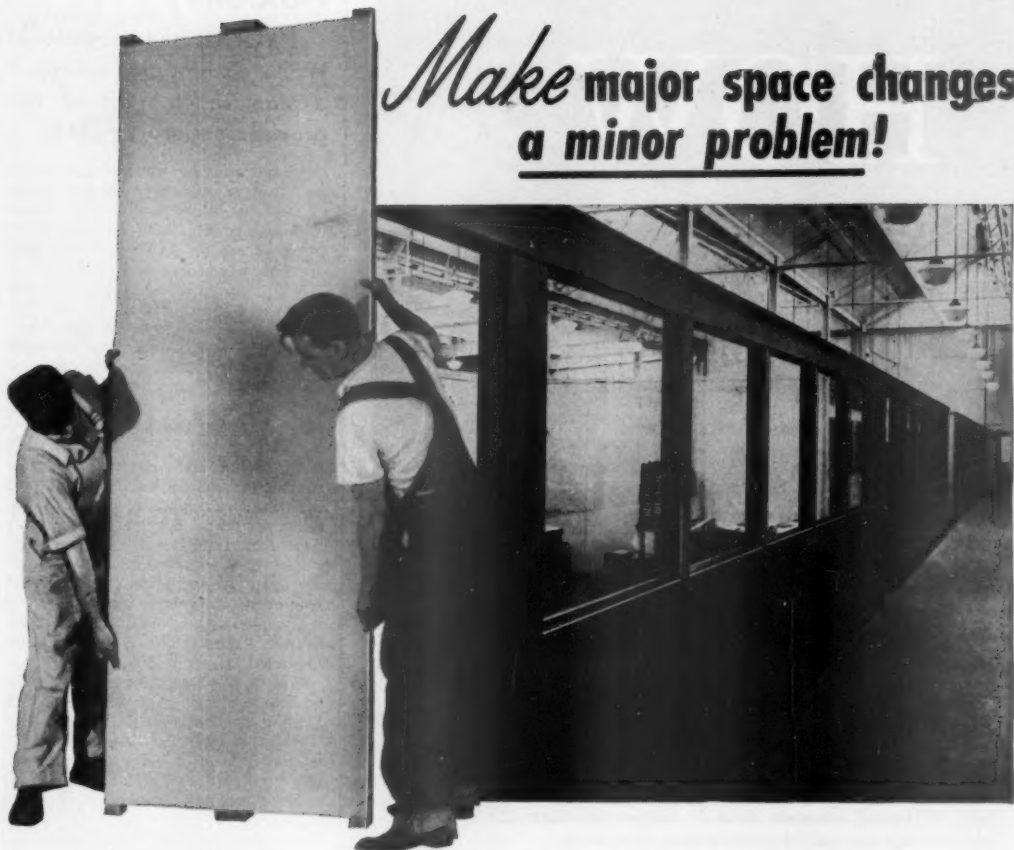
Little known outside the UAW circle, Conway has been tabbed the most important, ablest man in the union next to Reuther himself. Conway was studying law at the University of Chicago while working as assistant director of the University of Chicago Round Table when Reuther brought him to Detroit. An intellectual with an academic background in psychology and political science, Conway immediately became Reuther's closest associate. He is unaffected with the standard intellectual trait of hesitancy and doubt and has distinguished himself as a man of action—sometimes even ruthless action—in the union.

He has never run for any office in UAW, holding the appointive post of president's assistant. If Conway can't find the right man to run against Stellato, or make Stellato his captive, he may run for the presidency of the Ford local himself.

- **Boost**—Whatever his reasons for acting now instead of earlier, Reuther certainly gave the committee, now headed by Rep. John Wood of Georgia, new respect not only among its old friends, but among liberal groups as well.

What the committee had had to say about Communists in unions previously had been given short notice by these groups. When it called longshoreman Harry Bridges a Communist and demanded his deportation years ago, it got no backing from union spokesmen.

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WSB regulates health-and-welfare plans by the benefits to be provided, rather than by the cost to employers. It requires reports on new or amended plans, but lets them go into effect 30 days later without specific approval from the board—provided the benefits fall within specified bounds.

• **Not Dogmatic**—Up to Mar. 7, WSB had received 4,481 reports on new or amended plans. All but 1,050 followed the board's pre-approved standards covering disability, hospital and surgical, dependency, and retirement benefits.

The 1,050 were referred to a special health-and-welfare plan committee, and employers were told to wait for the nod before putting the out-of-formula benefits into effect. The committee now has acted on about 150 of these cases.

The 150 taken up furnish a guide to the flexibility with which WSB is handling welfare plans. Almost all of the applications got board approval, usually on one of two grounds:

- Benefits sought represented only minor deviations from pre-approved rules.

- Some special consideration—historical practices, industry or area practices, bargaining patterns—justified the approval.


- **Green Light**—WSB approved a number of low-cost benefits because they deviated only slightly from normal standards. One of these was polio insurance, provided widely in the West and Southwest. Another was a special \$300 accident benefit.

The board approved giving hospital and surgical coverage to pensioners as well as active employees, in addition to the death benefit (up to \$1,000) allowed by WSB rules.

The board O.K.'d noncontributory hospital, surgical, and medical expenses for dependents of employees of a Los Angeles drugstore chain, although WSB rules normally provide for such benefits only if employees pay 40% of the cost. The board agreed the non-contributory plan should be allowed because the bargaining union had won such a plan in food stores before the wage freeze.

- **Red Light**—On the recommendation of the health-and-welfare committee,

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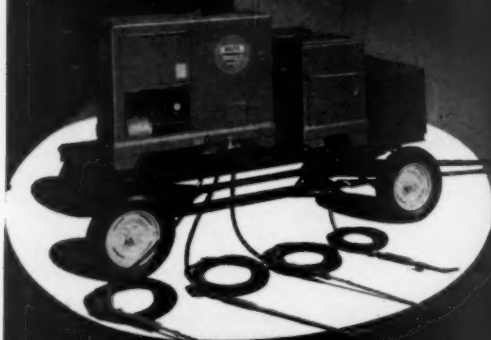
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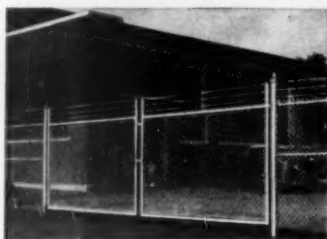


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WSB rejected or modified plans where they couldn't be justified as minor deviations or as the result of area, industry, or bargaining practices.

The board refused to let one employer give his workers, free, a group life insurance plan that provided coverage amounting to 185% of average earnings. Under WSB rules, a non-contributory plan can't provide coverage amounting to more than \$1,500, or more than 85% of annual earnings. To provide more insurance, the employer must use a contributory plan that taps employees for at least 40% of the insurance cost.

Another plan that didn't go through was a noncontributory hospital-benefit plan for employees and their dependents. WSB gave this only partial approval. It said its rules permit such a plan for employees, but not for their dependents. If dependents are to be covered, too, employees must pay at least 40% of the plan's cost.

Builders' Wage Hike Adds to Building Costs

Construction costs got an expected boost last week. The Wage Stabilization Board O.K.'d a 22½¢-an-hour pay hike for building workers in 1952.

WSB accepted Construction Industry Stabilization Commission recommendations of a 15¢ wage boost and up to 7½¢ an hour more in employer contributions to health-and-welfare benefits (BW—Mar. 8 '52, p. 168).

The increases aren't mandatory, but nobody doubts that they will show up—and quickly—in pay envelopes. Some 70% of the contracts covering 2.5-million on-site building workers are negotiated in the spring. Unions are going to bargain to get every cent of the increase.

• **More Than Minimum**—WSB found that CISC's recommended 15¢ raise figured out to more than the 14.7% raise now allowed workers in other industries; only 12¢ was due. WSB approved 15¢ anyway. It explained: (1) Unlike in other industries, many construction "fringe" costs are charged against permissible raises, so building workers should be allowed more; (2) building wages will remain rigid throughout 1952, while other workers may get additional cost-of-living raises; and (3) because of complex craft and area differentials in the construction industry, the flat 15¢ raise will be less inflationary than a percentage raise would be.

The board also said the 7½¢ additional for welfare benefits will give the building workers less than those in other industries will get under WSB's Reg. 19.



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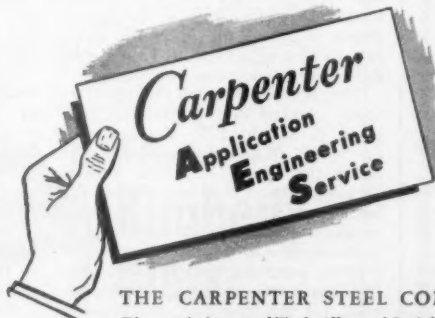
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There are 36-million **EMPLOYABLES** outside the labor force:
OF THESE...

... 13-million are **EXPERIENCED WORKERS**
... including 11-million **WOMEN**

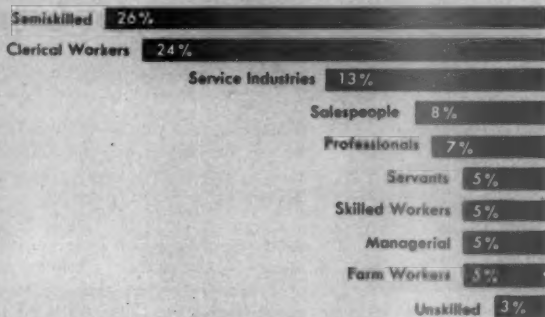
OF THESE WOMEN...

... 5-million have small children and so are not readily available, and...
... ½-million are over 65

THAT LEAVES...

... 5-million **WOMEN PROSPECTS**, and...
... 2-million **MEN PROSPECTS**, half of whom are over 65

HERE'S THE WORK BACKGROUND OF THE 13-MILLION EXPERIENCED WORKERS:



Date: March, 1951 figures, Bureau of Labor Statistics.

OUTSIDE WEEK

Plenty of Workers, But...

On paper, the nation has plenty of labor reserve to fill jobs in a defense economy. A close look at the figures dispels a lot of the optimism about that backlog of workers. It's there—but the characteristics aren't encouraging.

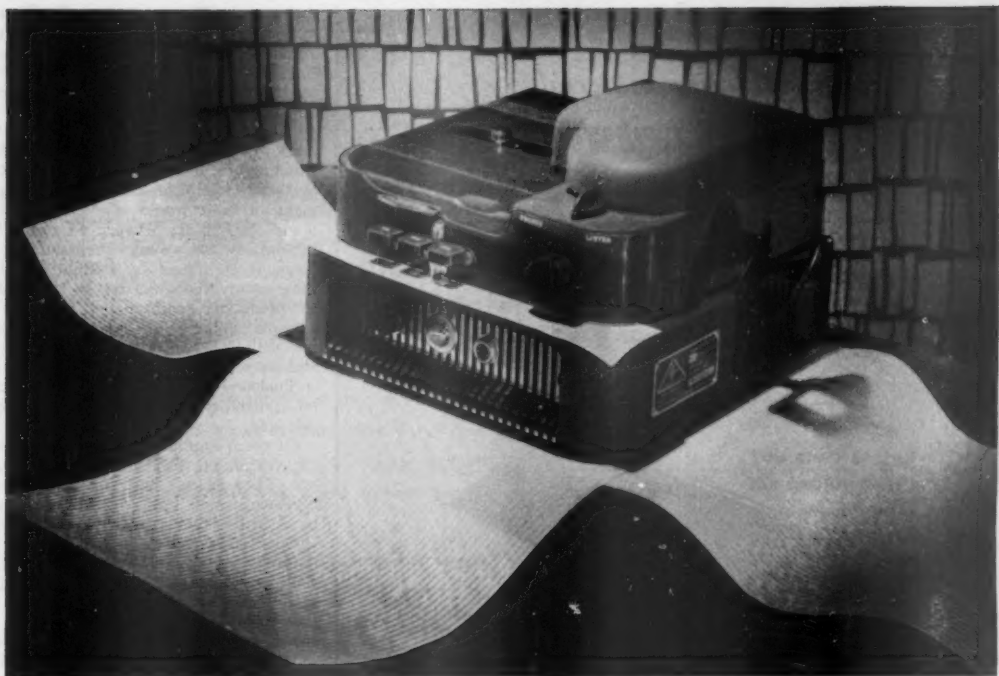
The Bureau of Labor Statistics recently checked into the reserve as it stood in March, 1951—the last date for which BLS had breakdowns. It found that about 36-million persons 20 years old and over were outside the labor force. That's not counting those permanently unable to work.

• **Deceiving**—On the face of it, this is a pretty promising backlog. But when BLS dug deeper, it found some hidden traps. Of the 36-million, for instance,

only 13-million had substantial paid work experience—that is, at least 90 days' employment either during World War II or since the end of the war. The other 23-million, at least 75% women, are unlikely prospects. They weren't drawn into the work force to any large degree even during the tight labor pinch of World War II. It's not likely a new shortage will lure them.

Even among the 13-million with work experience, about 11-million, or 85%, are women (chart, above). Half of these are mothers of small children. Industry found it hard to get mothers to take jobs during the war, and just as hard to keep them.

Another half-million of the women



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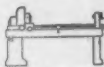
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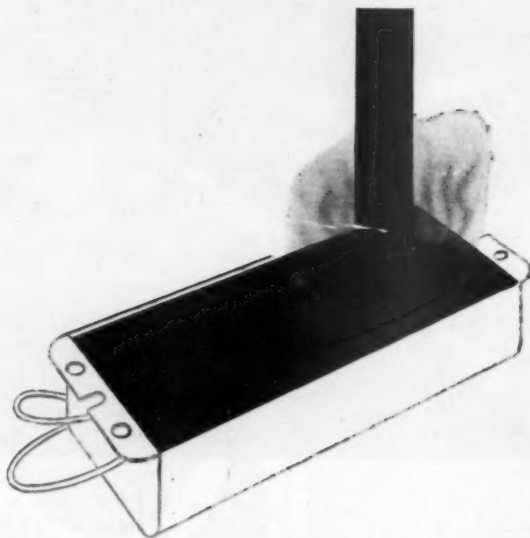


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are over 65. That leaves some 5-million women with work experience, between 20 and 65, and without small children. But of these, 2-million quit jobs because of family responsibilities; 1-million because of poor health.

Now take the men. About 24-million of the 13-million experienced workers are men. Roughly half are over 65. Given the proper incentives, many of these would take jobs again. Some 600,000 are between 45 and 65, presumably forced into premature retirement by illness or disabilities. Of these, many probably can be returned to productive employment. The remaining 600,000 are only temporarily out of the work force (most in schools), and are readily employable.

• **Shadow Deepens**—That's the picture on availability. Experience has its dark side, too.

Of the 13-million experienced workers, 4.8-million worked only during the war. They haven't had substantial employment since 1945. If they can be hired again, they may require considerable retraining.

Only 5% of the 13-million are skilled workers, and craftsmen are most in demand by an expanding industry. One-third are over 65.

• **Brighter Side**—About 25% of the 13-million are semiskilled workers. As a whole, the outlook on them is good. The majority are men, or women with no children. But the crying need for semiskilled workers is in durable goods manufacturing. That eliminates a substantial chunk of the reserve of semiskilled workers who had experience in other fields. Moreover, of the ones with durable goods experience, more than half are either mothers with small children or workers who haven't held jobs since 1945.

Clerical workers, currently in short supply, account for another 25% of the experienced reserve. But, once more, over half of those with clerical experience are young mothers, who would be hard to lure back to offices. Of the others, a fairly large proportion have had no recent experience. Since many clerical skills are lost quickly, they would have to have extensive refresher training.

The Pictures—Cover by Dick Wolters. Rus Arnold—138 (top); Bakelite Co.—130; Bureau of Mines, U.S. Dept. of Interior—106, 107; Canadair, Ltd.—73; Stan Easty—98 (top), 99; Harris & Ewing—154; Hot Rod Magazine—46 (top, ctr.), 47; Int. News—181; Bob Iscar—38 (bot.); Arnold Meyers—52; Robert Phillips—162; Standard Oil (N.J.)—28; United Press—32 (rt.), 116, 172.

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See clues, page 186



Detroit's Jobless Auto Workers...



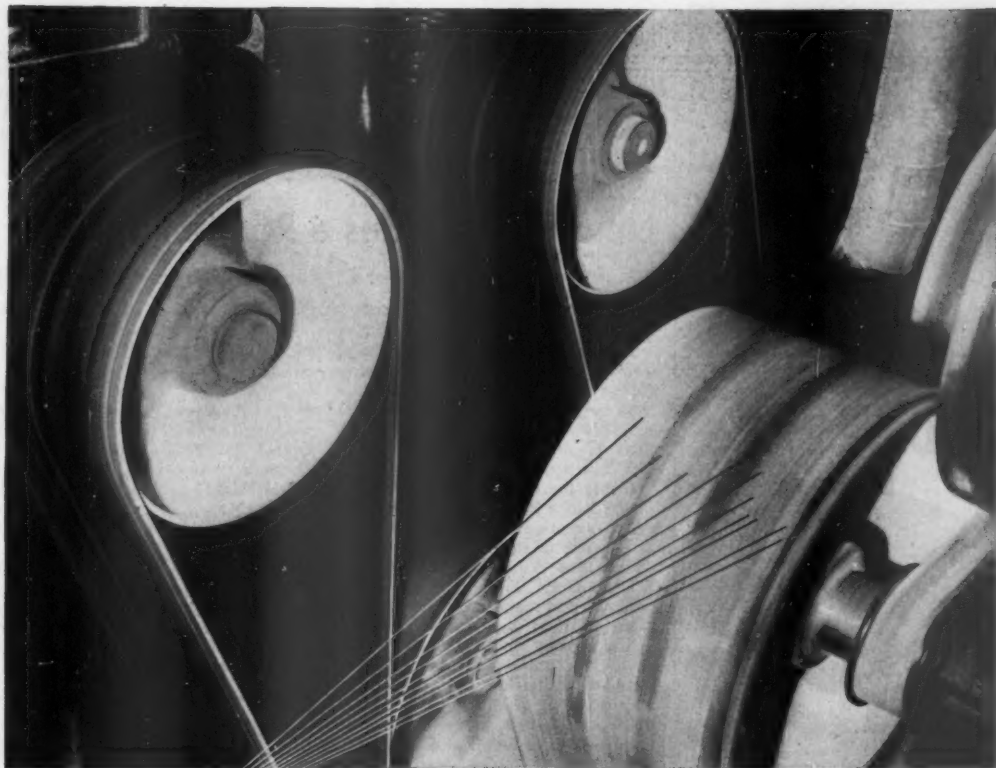
... Get Congressional Attention

Sen. Blair Moody of Michigan (left, above) and Walter Reuther, head of CIO's auto union, want Congress to supplement "inadequate" state unemployment benefits. They argue that the spreading pall of defense joblessness "should be charged against the defense effort," not against individual states.

A bill (S.2504) introduced by Moody would let any state tap federal funds for as much as a 50% increase in its

own funds. Aimed at helping states with an "unemployment emergency," the bill has an important proviso: The state has to use its supplemented funds to provide \$30 to \$42 a week in compensation for 26 weeks—more than most state laws call for.

In Michigan, where CIO says there are 105,000 idle among auto workers alone, benefits run from \$27 to \$33 a week for 20 weeks. To share the fed-



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eral funds, the auto state would have to increase both the amount and the duration of payments.

There's considerable political and business opposition to the Moody bill for that reason. Foes, including Sen. Taft, say S.2504 would be a step toward "federalized" unemployment compensation—something the states

have been fighting since jobless insurance started in 1935.

Opponents also say that to raise benefits in any area with a labor surplus would "seriously curtail industry's recruiting efforts," since idle workers would no longer have any incentive to move to regions with manpower shortages.

Union Shop Rides a Rough Road

A Presidential board recommended union-shop pacts for railroaders, but nobody has fallen into line since then.

Railroad nonoperating employees won only a paper victory when they got a union-shop recommendation from an emergency board a month ago (BW—Feb.23'52,p42). This week their 17 unions are about as far as ever from a union shop.

Before the board acted, unions had signed half a dozen railroads to agreements requiring nonoperating workers to join one of the 17 unions. Among others, New York Central, Baltimore & Ohio, Great Northern, and Southern railways had agreed to union-shop clauses in their labor contracts.

The unions hoped that, with this start, the union-shop policy would spread fast after the emergency board gave it strong public support. But it didn't spread at all. The unions haven't been able to negotiate a single union-shop clause since the board reported. If anything, resistance has stiffened.

• **Moral Force Only**—The recommendation handed down under the Railway Labor Act wasn't binding.

Ordinarily, there is strong public support for fact-finders' recommendations. But this support didn't develop in the union-shop case. Instead, the recommendation drew public criticism as a step toward government-directed compulsory unionism.

All major roads disregarded the recommendation entirely. Most said flatly that they wouldn't force employees—even if it was a question of a strike—to join a union if they didn't want to.

Southwestern carriers went further. They retained Donald Richberg, one of the authors of the Railway Labor Act, to oppose the brotherhoods' union-shop demand in court, if necessary.

• **Troubles Pile Up**—The nonoperating unions called strategy conferences this week to plan "next steps" in the dispute. They criticized the carriers' "run-around" on the union-shop issue. Beneath their tough talk was the hardly veiled threat of strikes.

Thus, new rail troubles are piling up on top of those that are already a serious national problem. Just two weeks ago three operating brotherhoods were enjoined from striking in a three-year-

old wage dispute (BW—Mar.15'52, p162).

In the wage case, engineers, firemen and enginemen, and conductors this week criticized "ill-advised and misguided intervention by the White House in railroad labor disputes." The unions warned that "resentment which has been held in restraint for more than two years" is threatening to break out of bounds in operating crews.

The operating groups are fighting against giving in to fact-finding board terms. With the nonoperating groups, the shoe is on the other foot. It's the carriers that are resisting the recommendations.

LABOR BRIEFS

Wage pattern for over-the-road trucking wage contracts may be set for 1952. Wage Stabilization Board has just O.K.'d a settlement covering 36,000 midwestern teamsters. Terms include a 19¢ raise, a \$1-a-week hike in employer payments for health-and-welfare benefits, six paid holidays, and more "fringe" benefits.

Negro firemen on Louisville & Nashville's southern routes have won equal seniority rights after a four-year legal fight with the railroad and the firemen's union. A settlement promises to wipe out discrimination in promotions.

A \$1.25 minimum hourly wage is being pushed by unions. Here's how: (1) Labor is backing a House bill (H.R. 6160) to hike the wage-hour minimum wage from 75¢ to \$1.25 an hour; (2) unions are trying to get WSB to declare wages below \$1.25 an hour "substandard," and to allow raises to that figure without regard to general wage controls.

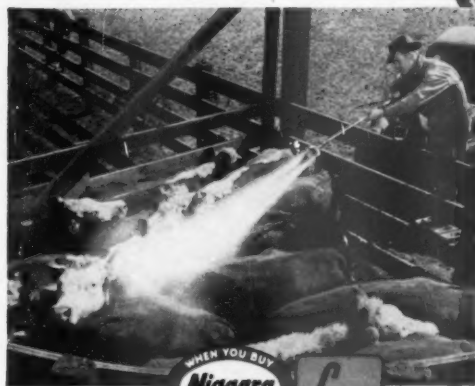
New IUE membership drive is under way across the country. The union has set up a six-month budget and beefed up organizing force. One goal is to unionize General Electric's salaried workers.



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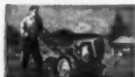
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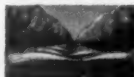
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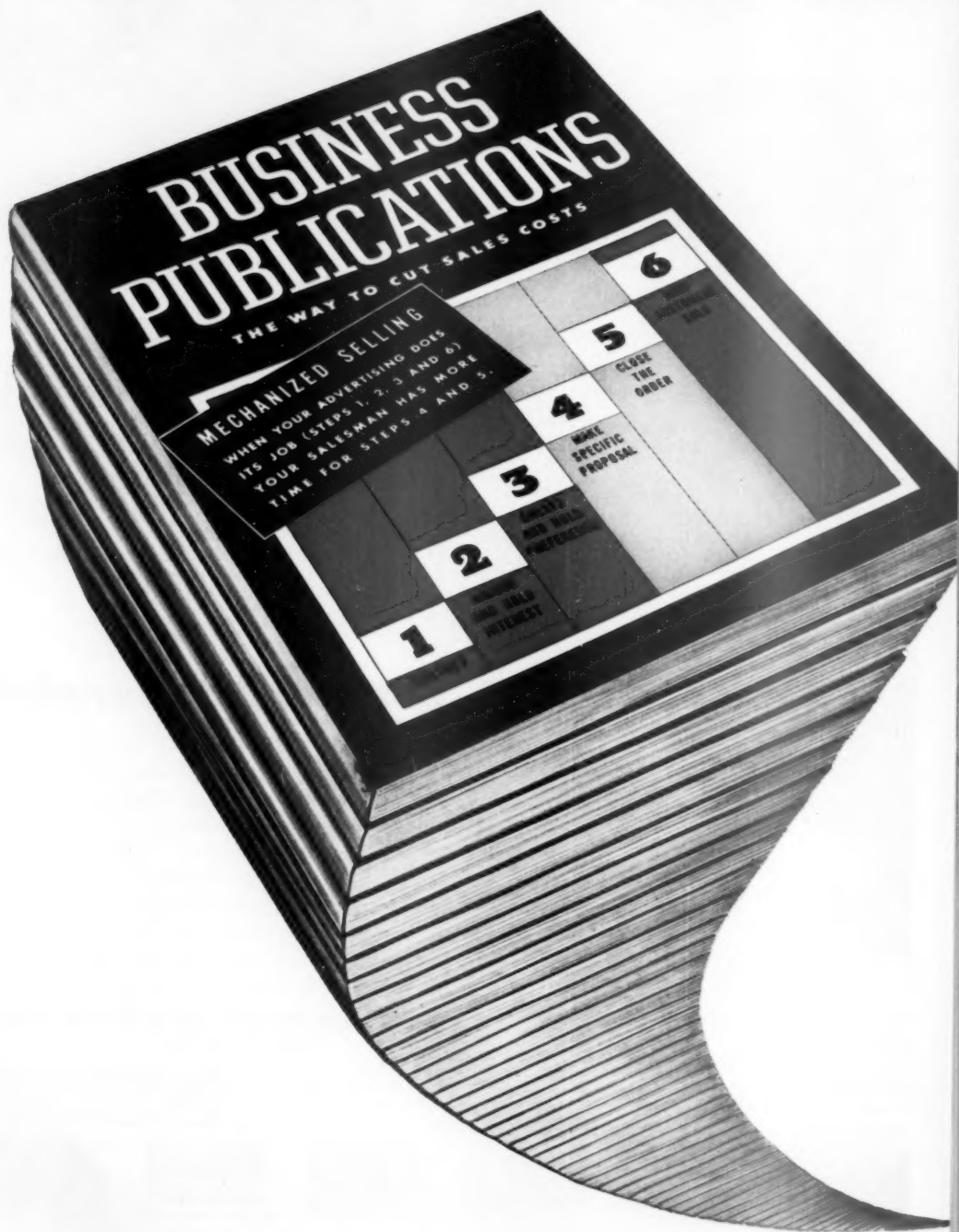


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INTERNATIONAL OUTLOOK

BUSINESS WEEK
MARCH 22, 1952



Stalin may soon force a diplomatic showdown over Germany.

Moscow has demanded Big Four talks on German unity. Coupled with this demand are proposals that have Washington wondering: Is Stalin now ready to give up East Germany in order to keep West Germany out of the North Atlantic Treaty Organization?

If that's the game, U. S. policy in Western Europe could become pretty well bankrupt.

Moscow's latest German move came via a diplomatic note to Washington, London, and Paris.

Unlike earlier Soviet statements on German unity, this one certainly is not propaganda. It doesn't vilify the West. It stresses the urgency of a quick Western reply.

More important, it proposes that a united Germany should have a national army, navy, and air force. That's a complete reversal of Soviet policy—and worldwide Communist propaganda—since Potsdam. Up to now, permanent demilitarization of Germany has been the line.

Western capitals are taking this shift on Germany very seriously.

Stalin doesn't change the basic party line lightly. Any shift puts a heavy strain on the international Communist network.

French Communists, for example, were flabbergasted by Moscow's latest note. Recently, their most telling weapon has been bitter opposition to German rearmament. Now they'll have to eat their words.

Stalin's offer sounded good to many Germans who have been suspicious of earlier bids for unity.

The new proposal gives the Germans, especially the nationalists, almost everything they want: unification, hope of greater economic strength, real national sovereignty.

To make his offer irresistible to the Germans, Stalin can throw in a promise of really free elections, supervised by the U. N.

Stalin's agreement to free German elections would be a real gamble.

He would be giving up Communist control in East Germany. And that would make it doubly tough to control the other East European satellites.

Still, the Soviet dictator may figure things this way: Short of war, this is my only chance of upsetting Western plans for integrating West Germany into a unified Western Europe. What's more, some day I can probably lure a united Germany into the Communist camp with offers of rich trade and the revival of the old German-Russian alliance.

If London and Paris agree, Washington will try these delaying tactics to thwart Stalin's game:

- Play on the German desire to get back territory lost to Poland. Stalin can't deliver that now.

- Spin out negotiations for elections as long as possible. Meanwhile try to get new contractual agreements with West Germany signed and the treaty for a joint European army signed.

It's doubtful, though, if such tactics can work. Things have gone so

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

MARCH 22, 1952

far now that the West German Socialists are demanding Big Four talks.

It's possible that three other recent Soviet moves are connected with Stalin's German moves:

- The continued stalemate in Korea. U.S. agreement to a Big Four meeting on Germany might be the Russian price for a Korean truce.
- Communist charges that the U.S. is engaging in germ warfare. This is meant to make West Europeans fearful of war.
- Announcement of the Soviet defense budget for 1952—the highest in peacetime (70% above 1948).

The British budget (page 181) has restored some confidence in the pound.

If that sticks, Chancellor Butler should get enough time to close Britain's trade gap without new emergency moves.

But Butler may not be able to balance trade at a high level. He has these unfavorable factors to contend with:

- Drought in Argentina and Australia may cut food supplies, raise prices.
- The slump in world demand for textiles is a blow.

Both Western Europe and the British Commonwealth are trying to balance their accounts by importing less and exporting more. That's practically mutual throat-cutting.

- The U.S. won't be buying heavily this year either from Britain or other sterling countries.

Foreign businessmen in Brazil are breathing easier. They're hopeful that Brazil will restore about the same rules for sending profits home that existed before President Vargas' clamp-down (BW-Jan.12'52,p150).

Brazil's National Economic Council has proposed a new foreign capital law. Roughly, it would restore the right to remit profits up to 8% of registered capital annually; to register as capital any profits in excess of 8%; and to send home up to 20% of registered capital annually.

The proposal may only be a trial balloon; rejoicing must wait until more important Brazilian financial people—or Vargas himself—take a stand.

The proposed law introduces an important new three-tiered classification of foreign investments. Here's the lineup:

"Special" investments would get top priority, would include those in rundown or underdeveloped areas. Besides the 8% profit remittance, they would be in line for special incentives—possibly subsidies and tax forgiveness.

"Favored" investments must pioneer in production of scarce consumer goods; either create or conserve foreign exchange; or contribute to Brazilian economic development. The 8% rule holds. This is by far the most significant category; the definition easily covers 90% of all foreign investments in Brazil.

"Common" investments would include all others. And they'd be held down to a profit remittance of only 4% of registered capital.

BUSINESS ABROAD



● Chancellor Richard Austen Butler's budget takes a new tack to toughen British economy and puts a new face on sterling, at least for the time being.

● It hopes to boost output by slashing income taxes for workers.

● Its crushing excess profits tax and tougher credit policy mean still further cut-back in capital expenditure, already dangerously low.

● But there's still a chance that London won't have enough gold and dollars by summer to hold the sterling area together.

Butler Puts Britain on a New Road

Last week, for the first time in nine months, dollars flowed into and not out of the Bank of England. Traders around the world were buying pounds instead of selling them. That was the direct result of the budget Chancellor Butler laid before the British Parliament on Mar. 6.

There was good reason why Butler's budget should have revived confidence in sterling, at least temporarily. The British Chancellor showed beyond a doubt that the Churchill government is trying to loosen up the welfare state by giving some play to traditional economic forces. Trade and financial experts, both in Britain and abroad, have long held that a move in this direction was essential for a country that lives, as Britain certainly does, by foreign trade.

• **First Aid?**—Three items in the budget tell a good part of the story:

(1) A 40% cut in food subsidies. This means that Britons will pay more for their food, that prices will help to ration it.

(2) Lower income taxes for the lower brackets. This will make extra work more attractive to skilled workers and to some of the middle class.

(3) A boost in the bank rate from 2½% to 4%. The increase will tighten the squeeze on capital investment.

These moves, plus others Butler had made earlier, certainly won't guarantee British recovery. At best, Britain is in for a year of painful adjustments. It will have to expect heavy unemploy-

ment as well as heavy business losses.

• **Getting Worse**—Hard as life in Britain has been since 1945, actually the situation would have been even worse if the country hadn't been cushioned against world conditions. Now, however, Britons must face the grim fact that all these cushions have disappeared:

• American economic aid has shrunk to a shadow.

• The prospect of a big boost in world demand for manufactured goods—from wartime arrears, postwar inflation, ambitious development plans—has pretty well evaporated.

• Germany and Japan are back on the competitive scene.

• Easy markets in the sterling area are partly saturated. At the same time, the collapse of the postwar boom in wool and rubber forces Britain itself to earn more of the dollars it needs.

• Up to Korea, terms of trade were pretty favorable to Britain.

Now it looks as if Britain is stuck permanently with having to pay higher prices for its imports than it gets for its exports.

The Churchill government spotted this change in Britain's position soon after it took office late last October. And it was Butler's job to work out a program to toughen the British economy for a new noncushioned existence.

• **Fast Action**—Last November Butler stepped in fast with first-aid measures. First he ordered a \$1-billion cut in British imports, followed up with two

further cuts. Then he asked for similar action from other members of the sterling area. To reduce the overload on British industry, plans were made to slow down the rearmament program.

Butler turned next to the monetary mechanism, which had been unused in Britain since 1931. The first step was to raise the bank rate in November from 2% to 2½%. More important, for the first time in 19 years, the Bank of England limited the daily supply of cash to the banking system (BW—Nov. 17 '51, p176). That forced the commercial banks to tighten up on loans. At the same time, terms for installment buying got tougher.

• **New Climate**—These prebudget monetary moves were meant mainly to cut the internal demand for hard goods that were needed for export and for defense. In no time at all the business climate changed in Britain. The London stock market suffered its worst slump since before World War II, as businessmen and bankers dumped securities on the market to get cash.

Today the best industrial stocks in Britain yield over 6%, as against 3% a year ago. By British standards, easy credit has completely disappeared from the economy. Bank loans cost 4½% to 5½%, housing mortgages 4½%, farm loans 5½%. The banks are even offering 2% for deposits.

• **Plenty of Nothing**—Under these conditions British business has been running short of cash. Since December, 10 of the biggest British corporations



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have raised £60-million in equity capital by offering stock to their own stockholders at yields of 6% to 10%. A long line of other British firms is waiting for a chance to raise capital.

The industrial climate has been affected, too, by a winter recession in consumer goods such as textiles and household furnishings. At the same time, metal shortages have cut overtime work in the metalworking industries, even put some firms on short time.

• **Good and Bad**—From the management angle, this change in the economic climate has had its advantages. Employers report that labor turnover has dropped sharply, that men are working harder. In some big plants output without overtime is equal to what it was previously with overtime.

In coal mining, the story has been different. The miners' bargaining position is as strong as ever. Because Butler has cut frills like free bus rides to work, many miners have stopped working an extra shift on Saturdays.

• **A Promise Fulfilled**—The Mar. 6 budget pushed the new Conservative policy a step further.

By cutting food subsidies by £160-million, or 40%, Butler saved enough to boost welfare benefits for the poor and aged and to reduce income taxes for highly skilled workers and part of the middle class. Extra work now becomes worth-while for Britons who earn between £10 and £20 a week.

• **For and Against**—There's real significance in the way British labor leaders have taken sides on Butler's budget. Lincoln Evans, head of the well-paid steelworkers union, is on Butler's side. Arthur Deakin, who leads the transport and general workers union, protests that the budget is unfair to low-paid labor. Some British observers think this difference proves that Butler hit the bullseye.

British businessmen are disappointed that Butler didn't throw any tax cuts in their direction. Crushing personal surtax rates stay unchanged, while the new excess profits tax adds a serious burden for many businesses just when the government's stiff credit policy is causing painful financial pressure. "Where's the incentive for management?" is the growing cry from British businessmen.

• **Good for Consumer**—Most British economists criticize Butler for not budgeting a cut in the nation's personal consumption to ward off more inflation. True, the Chancellor provided for a surplus of £500-million. But that's merely intended to prevent personal consumption from going over present levels.

In effect, Butler has let the consumer escape at the expense of industrial investment. By stiffening credit policy, the Chancellor is forcing a further

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cutback in private capital expenditure, which already is much too low to equip Britain for the coming competitive struggle.

• **Three Ways**—What of the gap in Britain's overseas payments, which forced the new economic policy on Britain? As Butler figures it, last year's deficit of over £500-million can be wiped out by three routes:

(1) Eliminating £300-million to £400-million of imports this year.

(2) Adding an extra £50-million worth of exports.

(3) Largely improving invisible earnings, such as receipts from shipping, insurance, oil, etc. For example, refin-

ery construction in Britain will soon offset the loss of the Abadan refinery in Iran.

• **Little Help**—But world economic conditions could knock these calculations haywire. There are some signs that import curbs in the sterling area and Western Europe could set off a deflationary spiral in world trade.

U.S. imports of raw materials are still low, and consumer buying in both the U.S. and Canada seems to be shrinking. That will make any expansion of British dollar exports extremely difficult.

Australia, which has been Britain's biggest export market, has been hit by

a serious crisis and won't buy much from Britain for at least a year. European countries are all cutting down consumer demands to make room for rearmament.

Then there's the immediate problem of gold losses. If speculative pressure on the pound picks up again, Britain could be in a real jam by June 30. Probably half of London's recent gold losses were caused by shortselling of sterling. If this business revives, despite Butler's budget, London's gold reserves would drop to under \$1-billion in another three months. At that level, it's hard to see how the sterling area could be kept going.



Norway to Open Up Its Far North

Development of country's Arctic resources will help undermine Communist influence.

Norway is getting set to strengthen one of the weakest links in the North Atlantic defense system—its strategically important northern provinces of Finnmark, Troms, and Nordland (map). This area is the only NATO-protected land that has a common border with the Soviet Union. And it's an area where Communist strength is gaining.

Last month the Norwegian parliament, the Storting, approved an eight-to-10-year plan to build up northern Norway. The program provides for development of industry, agriculture, and communications. It also aims to cut down unemployment, raise standards of living, and thereby undermine local Communist strength.

• **Hidden Wealth**—The land is rich in mineral resources. Along the Russian frontier, marked by the Pasvik River, is Norway's greatest iron-producing center, South Varanger, which has an

ice-free harbor. (On the other side of the river lie the rich nickel mines of Petsamo, now Russian-owned, but once a part of Finland.) Other undeveloped resources include pyrite deposits, zinc, copper, graphite, and molybdenum.

Even with the iron development, northern Norway traditionally has been weak, underdeveloped, and isolated. Agriculture and fishing account for more than 25% of the region's output, as compared with 10% for all of Norway. Industry in the three provinces accounts for only 20% of total output, compared with 33% for the country as a whole. The railroad stops 500 mi. short of South Varanger. Road communications are inadequate.

World War II made the situation even worse. The German army used the land as a base for an attempt to break through to Murmansk, thereby strangling Allied shipping over the

North Atlantic route. With the collapse of Finland in the fall of 1944, the Russians swept across the Pasvik River. The retreating Germans gave the country the scorched-earth treatment, sank most of the fishing boats, and evacuated the entire population except for those left hiding in the South Varanger mines and in the mountains.

• **Political Impact**—One result of the poverty and unemployment has been the rise of extremist political groups in the north. During the war collaboration with the Nazis was highest in the north. Today the Communist strength is relatively high. In the 1951 municipal elections, Communists polled 24% of votes cast in South Varanger, 35% in North Cape, and 40% in Alta. In contrast, for the whole of Norway, Communists polled only 8% of the popular vote. So the government is banking on development of a richer north

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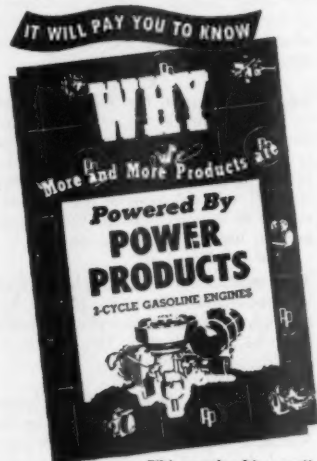
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country to cut down Communist strength and bring the area closer to the rest of the nation.

The threefold plan, developing new industry, agriculture, and improving communications, is an example of Scandinavia's system of "mixed economy." The government lays the groundwork and offers support with loans and reduced taxes, but private industry is encouraged to shoulder the burden of developing its own projects.

• **The Plan**—Specific proposals already in the works include: rapid expansion of hydroelectric power, first for industry, second for private homes; reconstruction of iron mines at South Varanger; expansion of the fishing fleet and building of fish-processing plants; construction of an ammonia plant; development of pyrite mines; and expansion of the Alta slate quarries. It is expected that in places where heavy industry settles, smaller industries will spring up. This industrialization will lead to improvement in agriculture to meet the demands of expanded local markets. Farm machinery stations will help the farmer mechanize his land.

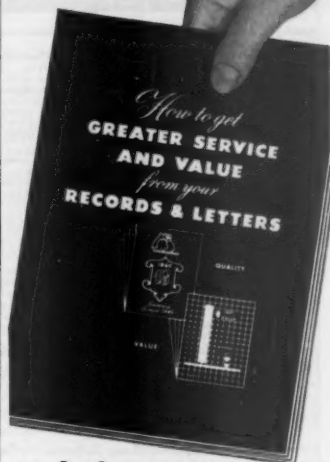
• **Home Financing**—Domestic financing by the Norwegian government will come from several sources. The Storting has set up a development fund of 100-million kroner (\$14-million) to be used for "top financing" of loans to private industry, above what private banks will lend. The fund may increase this figure by issuing government-guaranteed securities. Also, the fund may borrow from the State Unemployment Insurance Fund, which has assets of 440-million kroner. This move is justified, says the Storting, because northern Norway has long been the heaviest user of these funds.

Further financing will come from regular budgetary appropriations, depending upon Norway's defense commitments. Some small banks in the north will merge and thus facilitate transfer of funds from south to north. Special preferential arrangements in taxation and the allocation of import licenses and building permits will be extra inducements to private industry.

• **Plus U.S. Aid**—One of Norway's problems is to finance imports of mining machinery and industrial equipment. Export earnings probably won't be big enough to take care of extra imports like these. That leaves Norway dependent on economic aid funds from the U.S. The Economic Cooperation Administration (now the Mutual Security Agency) has already sunk \$425.7-million in Norway, of which only \$15-million is still unspent. Further aid may be channeled to North Norway.

There's no doubt that private investment from abroad would speed the program. But Norwegians are leery

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about outside help—they worry about "foreign domination." So foreign investors would have to go in on a minority basis, with ownership and management rights in Norwegian hands.

However, this system is working now in the construction, with U.S. help, of an aluminum plant at Sundalsora. It might work in the development of mineral resources of the north. There's room for a lot of expansion of the iron mining in South Varanger. Development of pyrite mining will also increase production of pyrite byproducts, zinc and copper.

Optimistic about the plan, Norway's Prime Minister Oscar Torp says he hopes the entire country will follow a similar program.

BUSINESS ABROAD BRIEFS

Turnabout: Bermuda, where autos were outlawed until a few years ago, is exporting second-hand cars to Britain. They find a ready market in the mother country, where cars are scarce because of the export drive. Some 800 Bermuda buggies made the trip within the last year.

Japanese common stocks may be traded on the New York Curb Exchange before long. Thomas Boylan, a member of the exchange, is off to Japan to see what can be arranged with businessmen there.

Sales to Russia and Red China dropped to near-bottom last year. Commerce Dept. reports U.S. exports to Russia at \$55,000 down from \$752,000 in 1950. Sales to Red China amounted to \$500—one shipment of books. However, U.S. imports from the U.S.S.R. remained high at \$27.4-million.

The multimillion-dollar fight against foot-and-mouth disease in Mexico has paid off. More than 60-million animals have been vaccinated; the disease is considered eradicated.

A second assembly line for the Comet jet transport plane will be set up in Northern Ireland, says Britain's de Havilland Aircraft Co., Ltd. First planes will roll out in 1954. Meantime, de Havilland is working on 20 Comets for British Overseas Airways. The first will go into service in May.

Disc deal: Philips Phonographic Co., the Netherlands, has an agreement with New York's Columbia Records, Inc., to exchange European against U.S. records. As part of the deal, Philips will process Columbia records bound for continental markets.

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What About the Foreign Aid Bill?

Big decisions are seldom easy to make. The foreign aid legislation now before Congress is a good example.

President Truman has asked \$7.9-billion for defense, "defense support," and Point 4 assistance to our allies in the next fiscal year. The reaction by and large has been unfavorable. Many Americans wonder if the promised end of foreign aid is ever to come. They feel that foreign aid is being accepted as a permanent budget item both by our government and by our allies. There is real and justified concern, evidenced by the recent statement of the United States Council of the International Chamber of Commerce, that this emergency aid is acting like a narcotic, dulling the senses of foreign governments to the critical need for economic and financial reform. Aggravating the situation is the apparent willingness of responsible citizens in some of those countries to indulge in a kind of diplomatic blackmail: Continue your aid, or we will be powerless to build our defenses against communism.

These concerns alone would make the going hard for any new foreign aid bill. But other factors add still more trouble. There is lack of confidence both in Congress and in the country in what the President and his Secretary of State say is necessary. Congressmen also recall that, even after the Korean War started, the President proclaimed the Marshall Plan recovery in Europe a great success a year and a half and \$5-billion ahead of schedule. To the confusion about Europe's real economic condition is added the President's discount of the immediate Russian threat implicit in stretching out our rearmament program by a full year.

Where the Ax Is Aimed

These facts form the background from which have come demands for big cuts in the President's \$7.9-billion request. The principal target for the slash is the economic aid section, \$1.8-billion of which \$1.4-billion is earmarked for the NATO countries. The argument is made that these nations are back to prewar levels of production and, therefore, our help should be limited strictly to military items.

This point is straightforward enough, but the problem stubbornly remains. In the first place, the distinction between military and economic (or defense support) aid is largely a fiction. True, a machine gun is not the same as a bale of cotton. But the economics of the situation is simply this: The standard of living and the rate of rearmament at any given time in the NATO countries is determined by their internal resources and the help we give them. Less assistance can only mean, in the short run, less rearmament or a lower living standard.

What upset the applecart and caused trouble was the Korean War, which forced these countries to devote a

larger slice of production to defense. This threatens living standards that are not yet high enough to take a cutback in favor of rearmament without trouble.

Bad Time for Retrenchment

Certainly, the time could scarcely be worse for deliberations about what our long-run foreign aid policy should be. Britain's Chancellor of the Exchequer has just revealed that her reserves of gold and dollars are below \$1.8-billion, off more than half a billion dollars in the first two months of this year. A conservative government in France is trying to get its roots down in an atmosphere of economic crisis. The European Army plan is just emerging.

The issue, it seems to us, is whether we are prepared to face the consequences of a drastic cut in the foreign aid program now by, say, eliminating all economic aid.

- Such a cut means that something in the economies of our allies must give. Is Britain, with a meat ration of less than 20¢ per week, going to pull in her belt some more? Probably not. The more likely result is a cut in the British arms program. That will certainly be the reaction in other countries as well. It should be understood, too, that the cutback in their defense programs would be more than the reduction in economic aid, since our supplying a critical item can increase their arms output by an estimated \$2.50 for every \$1 of help. And this cutback would come at a time when the Russians have just announced a bigger arms budget than ever before in peacetime. Are we prepared to face this consequence?

- Such a cut would probably put many of our allies in the position of being forced to resume or expand trade through the Iron Curtain. Are we prepared to face up to this consequence?

- Such a cut might well be the straw that breaks the ability of France to carry on the costly war in Indo-China. If Indo-China should go by default, that would mean the end of a free southeast Asia, and it would ultimately mean huge American outlays to sustain the economy of an isolated Japan. Are we prepared for this?

These consequences are compelling. They illustrate why the decision before Congress is difficult. They counsel extreme caution in slashing foreign aid drastically at this time. It may be that the way to cure a convalescent is to deny him care and medicine. But it can lead to a relapse. Contributing to a relapse now among our allies is a big risk to run. It is a risk we should not run. But as we move to meet the problem of the immediate future, we, together with our allies, must summon up the intelligence and energy to find a lasting solution to restore them to economic self-reliance.

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THE DAY NIAGARA FALLS

bubbled over

It began suddenly that morning of April 1.

FLASH: NIAGARA RIVER BELOW FALLS COVERED WITH SUDS LIKE WHIPPED CREAM A YARD THICK. (CORRECTION TO EDITORS) NOW TEN YARDS THICK!

The boys on Goat Island emptied the last of their stolen drums of Santomerase No. 1 into the river above the cataract.

MAID OF THE MIST SIGHTSEEING BOAT HAS DOCKED SAFELY. ALL PASSENGERS HAVE FOUGHT WAY TO TOP OF GORGE IN A CLOUD OF BUBBLES.

One youngster on Goat Island grinned to the others, "Boy, this'll be the biggest April Fool joke on record."

GORGE BUBBLING OVER. SUDS BACKED UP TO HORSESHOE FALLS. DOWN RIVER, WHIRLPOOL LOOKS LIKE A GIANT WASHING MACHINE. CAUSE STILL UNKNOWN.

★ ★ ★

This prank-that-never-happened *could* happen if the pranksters were to be wasteful enough to dump into the Niagara some drums of Santomerase No. 1, Monsanto's all-purpose detergent and wetting agent.

Whether the water is rain-soft or ocean-hard, river-cold or geyser-hot, Santomerase No. 1 (flakes, granules, powder) makes billows of rich suds. Its applications in household and industrial cleaning compounds are almost without limit. (Three densities for any bulking need. Available from 13 handy warehouses.)

Few detergent formulators or manufacturers want to fill the Niagara gorge with bubbles... but who among them isn't interested in attaining comparatively spectacular results in commercial or household cleaning compounds? To them all, we urge, write us for the technical information in our free booklet, "Santomerase No. 1 All-purpose wetting agent and detergent."

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